DOCUMENT RESUME

ED 279 018 CS 210 316

TITLE Writing to Read Program. Final Evaluation Report. E.C.I.A. Chapter 2, 1985-1986.
INSTITUTION District of Columbia Public Schools, Washington, DC. Div. of Quality Assurance.
PUB DATE Aug 86
NOTE 117p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Computer Assisted Instruction; Evaluation Methods; Grade 1; Kindergarten Children; Primary Education; Program Development; *Program Effectiveness; *Program Evaluation; *Program Implementation; *Reading Writing Relationship; *Writing Improvement; Writing Research
IDENTIFIERS District of Columbia Public Schools; *Writing to Read Program

ABSTRACT

During the 1985-1986 school year, the District of Columbia Public Schools (DCPS) implemented the Writing to Read program, which is designed to improve the writing, language and vocabulary development, and reading of young children. The Planning, Monitoring, and Implementing (PMI) Evaluation Model for Decision Making was used to evaluate two things: (1) whether the majority of teachers implemented the program as designed; and (2) whether the students in the program increased their writing achievement at a greater than average rate. The project involved 2,813 children in kindergarten and first grade. Teachers were interviewed about their use of the program, and student progress was assessed via the Metropolitan Achievement Test and the DCPS Writing Sample Scale. Results indicated that: (1) the majority of teachers implemented the program as designed; (2) the processes necessary for a successful program were present; (3) teacher experience in the program did not greatly affect performance outcomes; (4) students' scores showed a statistically significant increase over the scores of comparison groups on the reading and language subtests of the Metropolitan Achievement Test; (5) although first grade students' scores were significantly higher than those of the comparison group, they were not as high as might be expected given the kindergartners' achievement level; (6) the mean scores of students in the program were at higher levels than those of the comparison groups. (Appendixes comprise the bulk of the document and include workshop agendas, teacher questionnaires and results, descriptions of writing stages on which the DCPS writing scale is based, and statistical data analyzing test results.) (JD)

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DISTRICT OF COLUMBIA PUBLIC SCHOOLS

FINAL EVALUATION REPORT

for the

WRITING TO READ PROGRAM

E.C.I.A. CHAPTER 2

August 1986

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PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

WRITING TO READ PROGRAM

Final Report

1985-1986

Prepared by
Division of Quality Assurance

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EXECUTIVE SUMMARY

The Writing To Read program in the kindergarten is a computer based writing program with correlated Work Journals, typewriters, tape recorders, games, supplemental language development activities, and free writing. While learning 42 phonetic sounds in the context of words, the children begin writing, using phonetic spelling for words they would otherwise avoid. By the end of the year, they make the transition to standard spelling and increase from one-word stories to compositions of several pages. First grade students continue writing instruction but without the use of the computer and other equipment.

The program in the District of Columbia Public Schools comprised 2,812 kindergartners and first graders in 113 classrooms in 27 schools from all regions of the district during the 1985-86 school year.

The evaluation was both process and product oriented. Innovation configuration, diagrams and Levels of Use interviews were held, and a project-designed questionnaire was distributed to determine how the project was being carried out. A norm referenced instrument, the Metropolitan Achievement Test was administered to measure reading and language development. The DCPS Writing Sample Scale, developed by the project consultant, was administered to measure creative writing skills. The questionnaires were sent to all project teachers. The other data were collected from a 14 school sampling of students and teachers representing all regions and a matched comparison group.

Following are the evaluation findings:

1. Levels of Use interviews indicated that the majority of the teachers were carrying out the program as designed and at the Routine Level where use is stabilized.

2. The questionnaires showed that the processes necessary to having a successful program, in general, were occurring.

3. The process evaluations demonstrated some differences between teachers experienced in the program and those new to the program, but the differences apparently had no great effect on performance outcomes.

4. Scores of kindergarten students and first grade students in the program showed a statistically significant increase over those in the comparison group on the reading and language subtests of the Metropolitan Achievement Test.

5. Although first grade students' scores were significantly higher than the comparison group they were not as high as might be expected considering the kindergartners' achievement level.

6. On the DCPS Writing Sample Scale, the means of the project students were at higher stages than those of the comparison groups in both grades and for both samplings with the differences being statistically significant.

Based on the evaluation it is recommended that the program continue as designed; that a long range evaluation study be planned to produce data to show the longevity of the effects; and the conditions be changed in the first grade program in an attempt to maintain the high performance level reached by the kindergartners.

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My Favorite Summer Activity

By: Simon Tam
Kindergarten, Thompson Elementary - May 1986

My favorite summer activity is riding my bike! I bot my bike at the stor. I ride to the park with my grandfoder. Do you like my bike? Yes, I like my bike. My bike has two whels. My bike is red and black. Sumtims I ride everday. Sumtims I ride with my friend. My bike is butifol. We tak ters rideing. Then we go bak hom. The end.

My Chair

By: Tinesha Lyles
Kindergarten, Martin Luther King - May 1986

I hav a chair. It is pretty. I like my chair. My chair is big. It is brown. I can read in my chair. I can eat honey in it. I can rock in My chair. My mother bort that chair. Now dont you brak it. Becuse my mother will not buy me another one And I'm going to get mad it you brak my chair becuse I like my chair very much.

These were typical stories written by DCPS kindergartners in the Writing to Read program during the 1985-86 school year. Are they good stories? How do they compare with the writing of similar DCPS students not in the program? Is there a carryover to other language areas and to reading? Are teachers new to the program able to show significant gains in their students' progress or must they have experience? Is the first grade program without computers and other hardware equally effective? How do the teachers feel about the Writing to Read Program? These are some of the questions that the present evaluation attempts to answer.

GOALS, OBJECTIVES AND INTENDED OUTCOMES

Goal: To improve the writing, language development, vocabulary development and, as an extra benefit, the reading, of young children

Objective A: A majority of the DCPS kindergarten and first grade teachers in the Writing to Read program will demonstrate that they are implementing the program as designed, during the 1984-85 school year.

Intended Outcomes, Objective A:

1. An analysis of interview data completed by the DQA Evaluation personnel by June 1986, will show that a majority of the project kindergarten and first grade teachers interviewed (at least a 50% sample) are implementing the program as designed, measured as follows:

   a. innovation configuration diagrams will show all areas in the acceptable range;

   b. Levels of Use (LoU) ratings will be at Level III, IVA or IVB (Mechanical Use, Routine, or Refinement).

2. An analysis of results of completed project-designed teacher questionnaires submitted to the DQA by the project coordinator by June 1986 will show that the majority of project teachers state that they are implementing all parts of the program as designed.

Objective B: At the end of one year, students of DCPS kindergarten and first grade teachers using the Writing to Read program, will increase their creative writing achievement at a greater than average rate, as measured by a standardized readiness test and a rated writing instrument.

1a. Analysis of the results of the Metropolitan Achievement Tests administered in December 1985, and the spring of 1986 will show that kindergarteners using the Writing to Read program increased their achievement at a greater than average rate as follows:

   i. There will be a positive gain on the Normal Curve Equivalent (NCE) scores from the pretest to the posttest on the language subtest.

   ii. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the language subtest.

   iii. There will be a positive gain on the NCE scores from the pretest to the post-test on the reading subtest.

   iv. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the reading subtest.

1b. Analysis of the results of the Metropolitan Readiness Tests administered in the spring of 1985 and the Metropolitan Achievement Test administered in the spring of 1986 will show that first graders using the Writing to Read program increased their achievement at a greater than average rate as follows:

i. There will be a positive gain on the Normal Curve Equivalent (NCE) scores from the pretest to the posttest on the language subtest.

ii. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the language subtest.

iii. There will be a positive gain on the NCE scores from the pretest to the post-test on the reading subtest.

iv. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the reading subtest.

2a. Results submitted to the DQA by the project coordinator by June 30, 1986, of findings of a panel of experts trained to rate students' writing samples, will show that kindergarteners using the Writing to Read program increased their writing ability at a greater than average rate as follows:

i. On samples taken in December and May, graphs will show higher scores for project students than for those of a comparison group.

ii. Final scores on samples of writing of project students will be significantly higher than those of a comparison group.

2b. Results submitted to the DQA by the project coordinator by June 30, 1986, of findings of a panel of experts trained to rate students' writing samples, will show that first graders using the Writing to Read program increased their writing ability at a greater then average rate as follows:

i. Final scores on samples of writing of project students will be significantly higher than those of a comparison group.

ii. Final scores on samples of writing of project students will be significantly higher than those of a comparison group.

BACKGROUND AND PROGRAM DESCRIPTION

Background

In the fall of 1982, IBM placed the Writing to Read System in 21 school districts around the United States, including 15 schools in the District of Columbia, in order to measure its effectiveness in teaching children to read and write. After helping to support the system for the first two years, IBM reported that in their national evaluation, students reading ability as a group was significantly higher than the national norm. They now maintain that the Writing to Read program has been adopted by 1,200 schools across the country and has more than 100,000 alumni.

The Writing to Read program was introduced into the District of Columbia Public Schools during the 1982-83 school year. Kindergartners in 15 schools participated. The same schools participated in 1983-84 and 1984-85. During 1984-85, an assessment of the gains made by the Writing to Read DCPS kindergartners on the pre-reading section of the Metropolitan Readiness Test, showed a significant increase in percentile points pre-to posttest, from 35th to 66th. A comparison group scored at the 59th percentile on the posttest. The pre-language sub-test did not show a difference between the two groups. "The absence of a difference," according to the evaluator, "may be due to the make-up of the language sub-test which includes quantitative reasoning skills, number-numeral correspondence, and part-whole relationships." Those were not the skills emphasized by the Writing to Read program and, thus, they had an equal chance of being learned by both groups.

A more complete evaluation was designed for 1985-86, using the following methodology: (1) matched comparison groups were selected in advance, (2) a standardized test was selected to measure language development as well as reading, (3) a writing instrument was used three times during the year that would indicate writing stages of each group, (4) a first grade component was assessed and (5) additional teacher information was gathered through questionnaires and interviews.

Program Description*

The Writing to Read program consists of a computer-based writing program, correlated Work Journals, typewriters, tape recorders, games, supplemental language development activities, and free writing. In the kindergarten, the children are taught 42 phonetic sounds (phonemes) in the context of words that let them begin writing and illustrating their writings immediately. They use phonetic spelling to write words they would otherwise avoid because of the many inconsistencies in the English language. Children write daily and without negative feedback about their creations. They make the transition from phonetic spelling to standard, and from one-word stories to compositions of several pages by the end of the school year.

* Program description is from a paper presented a the 1986 Annual Convention of the American Psychological Association, Washington, D.C., August 23, 1986, Kindergartners' Creative Writing: Encouragement Through Computers and other Teaching Strategies, Deloris Saunders, Thelma Michael, Marcia McBeath, and Mark Arenas.

Children are taught phonics in the context of words opposed to individual letter sounds because the traditional approach of teaching consonants and vowels separately is contradictory to the way children learn language. Through an aural mimic process of repeating what they hear, children reproduce clusters of sounds. When sufficient maturation occurs, they mimic words, then sentences, and ultimately conversations with unlimited fluency. This aural-minic process results in children acquiring extensive oral vocabularies. The range of oral vocabularies for five (5) year olds entering kindergarten has been placed between 500 and 2,500 words. In spite of the extensive vocabularies children bring to school, they are limited to oral usage. They have no other means by which to use the language. Yet it seems obvious that most children desire to write at very early ages. During the toddler stage, for example, they reproduce scribbling whenever they have access to writing instruments. They write on walls, furniture, bed sheets, and paper. It is from utilizing this natural instinct, that unless they are given a tool to write, they continue to scribble often into second grade.

Through a phonetic system for teaching writing, kindergarten children learn to write fluently. Moreover, they develop a joy for writing and many become sophisticated writers. By the end of kindergarten, those children who have been taught appropriately, write compound sentences, express concepts of distance, time, relationships (material and personal), and well-being. The levels of writing produced by kindergartners was enhanced by the Writing to Read system and is easily comparable to the products of second, third and fourth graders in traditional writing programs.

Procedures

Children are initially provided significant opportunities to use their oral vocabularies in structured developmental experiences. They share personal experiences, talk about favorites (food, pets, friends, etc.), describe events, and talk about school. They are introduced to their names in print through name tags and letter cards which spell their names. They trace them, shape them with clay, and draw them. They read a variety of charts, posters, classroom exhibits. The most significant element of the program is that children have a scheduled "writing period" each day, even when they are in the scribbling stage.

The children are provided a wide variety of language readiness and language development activities. They include in part, socio-drama, music, poetry, bodily expression, drawing, writing, games, speaking, simulation, listening, and picture reading. The rich variety of activities that the children are exposed to extends their oral vocabulary and develops a sense of comfort in using language. Not all children automatically interact and use language freely. During readiness, the children develop awareness of letter sounds, blending, and letter formation. Approximately six (6) to eight (8) weeks is devoted to readiness. Having acquired language readiness, including letter recognition and some familiarity with the keyboard (through simulation), the children are scheduled into a language development center. The Writing to Read Center (IBM) is the language development center. The children are introduced to a set of individual letter sounds and blends (42 sounds) by a tutorial format computer program. Following instructions at the computer, the children may engage in two (2) to three (3) words for each cycle to teach the forty-two (42) sounds.

Simultaneously the children are provided classroom writing instruction that focuses on blending, other forms of word study, and free expression of ideas. Penmanship is given limited attention by the teacher and spelling is not a concern. The children spell words as they hear them and are not criticized for their choice of spelling. They are coached to sound out letters and blends to form words. First grade students continue in a similar program but without use of the center.

Writing is the focus of the language arts program. Whenever possible the skills and processes the children are taught culminate in written products. Initially they write for free expression, but as they advance in writing they demonstrate skill development through written products which take on a variety of formats (stories, poetry, reports, etc.). In addition to their regular writing assignments, the children are asked to write on a designated theme or topic three times a year. The products are submitted to the Writing to Read staff for analysis of writing achievement. Teachers attend staff development sessions to learn a phonetic approach to teaching writing and a host of writing strategies. They are also trained on the stages through which children progress as they develop writing skills.

METHODOLGY

Subjects

The program in the DCPS was expanded during the 1985-86 school year to include the kindergartners in 27 schools as well as first grade programs in the 15 original schools. There were 2,812 kindergartners and first grade students in 113 classrooms in all regions of the district. The classes reflected the diverse ethnic, social, religious, and economic strata of the city, with 96% from ethnic minority groups. The children spoke more than 35 languages with many of them speaking no English when they began. Questionnaires were sent to all teachers.

The subjects used for the rest of the data in this evaluation consisted of a sampling of students and teachers from each region and the comparison group. There were a total of 14 schools -4 with teachers previously in the program, 4 with teachers new to the program, and 6 comparison schools. The project schools were randomly selected; the comparison schools were matched as closely as possible on the basis of the following criteria: socio-economic level determined by number and percent of students entitled to free lunch; school size; and test score information - percent of students at or above the national norms in grades 3 and 6 averaged.

Instrumentation and Type of Analyses

With an "Innovation Configuration" diagram (following the procedures described by the Research and Development Center for teacher education at the Unversity of Texas at Austin), 22 kindergarten and 9 first grade teachers were interviewed and asked about their use of the program, with special emphasis on the 14 program components. Results were reported indicating the number of teachers with acceptable configurations.

"Levels of Use" ratings, determined through structured interviews, (a procedure also developed at the University of Texas), characterized the teachers' use of the Writing to Read program according to eight descriptive categories. The interviews were held with all of the teachers who had demonstrated acceptable configurations. Results were reported indicating the number of teachers at each level.

A project-designed questionnaire for kindergarten teachers consisted of 6 parts with the number of questions in parenthesis as follows: Effect of Visitors (1); Writing Questions (12); Language Development Questions (4); Typing Questions (5); Management System Questions (20); and Aide Questions (8). The questionnaire was developed and used during the previous year, and refined for present use based on the past experience. A shorter questionnaire was designed for first grade teachers as follows: Effect of Visitors (1); Writing (12); Language Development (3); Other (2). The project-designed questionnaires were answered by 74% of the kindergarten and 73% of the first grade project teachers. Results were reported by means when appropriate and by percent varying with the type of item e.g. five point scale yes-no. Where comparisons could be made between experienced teachers and those new to the program or between kindergarten and first grade teachers, means were used to determine differences on an independent t-test acceptable at the .05 level. A norm referenced instrument, the Metropolitan Achievement test, was selected because it contained both reading and language subtests. It was administered in November 1985, to kindergartners in the Writing to Read and comparison groups and in May 1986 to the kindergartners and first graders in both groups. Approximately 1,500 students were tested. Analyses were completed using NCE scores with means converted to percentiles. Significances of differences between Writing to Read and comparison groups were determined through t-tests computed using the SPSS program, with differences accepted as significant if the t distribution probability was at the .05 level. Kindergartners were tested in November and again in May, but in analyzing results, it was shown that the comparison group had a much smaller percentage of students taking both pre- and posttests. Since a t-test of November scores showed no significant difference between the groups, the posttest results were used to indicate differences. A posttest only design was used for first graders who were tested only in May.

After a thorough search from which no adequate instruments were located to judge the writing samples of young children, the DCPS Writing Sample Scale developed by Dr. Deloris Saunders of George Washington University was used to measure improvement in the production of students' creative writing. The scale indicates 10 specific stages. The DCPS Writing Sample Scale, was used by a panel of trained experts to rate Stories written by children in both the program group and the comparison group. The panel included early childhood professors (2), early childhood teachers (2), elementary education supervisors (2), and elementary education specialists (1). They were trained to evaluate and "grade" or rate the writing samples submitted by the participating schools. The panel rated the samples from one to ten (1 to 10) as defined in the writing scale criteria described in the next section.

Prior to rating the samples from the schools participating in the evaluation design, the panel was trained to a minimum of eighty (80) percent accuracy in grading the children's writing. Final scoring ranged from eighty-five (85) percent to one hundred (100) percent accuracy. When the panelists reached minimal accepable accuracy, they were given two sets of writing samples for a single school; one set for December 1985 and one set for May 1986. All panelists were given additional schools to rate until all samples were evaluated.

A random sample of students was selected for scoring. Results were analyzed on the total number of students at each writing stage, testing the significance of the differences between Writing to Read students and comparison students at both times of the year and in both grades, using a t-test, with differences accepted as significant if the t distribution probability was at the .05 level. Statistics were computed using the Lotus 1-2-3 program.

RESULTS

Innovation Configurations

There were 22 Writing to Read kindergarten teachers in the experimental group and all of them were interviewed. Of the 22 interviewed, 20 or 91% had acceptable configurations. One of the teachers with an unacceptable configuration was from the original group of schools and one from the new. The former's configuration was unacceptable in that the teacher spent less than 3 hours a week in the lab. The other teacher had incomplete records and also was of the general opinion that her students did not like writing. The other 20 teachers tended toward ideal configurations (more than just acceptable.)

There were fewer first grade teachers interviewed (8 out of 13 or 62%). Of the five teachers that were not interviewed, two were ill and three were unable to set a time with the interviewers. Five of the eight teachers or 62% had acceptable configurations, again, tending toward the ideal rather than merely acceptable. The three with unacceptable configurations all stated that their students produced stories with nine sentences or less.

Levels of Use

Of the 22 kindergarten teachers interviewed, one, a teacher in a school new to the program, was at Level 3, Mechanical; 16 were at Level 4A, Routine; and two, both teachers in original Writing to Read schools, were at Level 4B, Refinement; one interview was incomplete, and two of the teachers had unacceptable configurations. Thus, the majority of the teachers were at the Routine level where use is stabilized.

Of the eight first grade teachers, four were at Level 4A, Routine, and one was at 4B, Refinement. Three could not be included because of unacceptable configurations. Because of the smaller number of scorable interviews, the first grade interview results must be interpreted more cautiously. But the majority of those represented were at the Routine level where use is stablized.

Questionnaires

The kindergarten questionnaire was completed by 51 teachers representing 1,261 students with 27 teachers from the original Writing to Read schools and 24 from the new. It contained 52 questions divided into the following categories: Visitors; Writing; Language Development; Typing; Management System; and Instructional Aides.

The first grade questionnaire was completed by 32 teachers representing 809 students. Since first graders do not use the lab, have limited related classroom equipment, and no aides, their questionnaire was shorter, having 18 items. The categories were as follows: Visitors; Writing; Language Development; and Summer Lesson Preparation. Some of the questions in the first three sections were similar to the kindergarten form.

Although all 52 kindergarten items and 18 first grade ones will not be reported here, the sections will be summarized and some of the individual questions examined. All items are summarized in the appendix to the complete report.

The first item was on the effect on the program of having visitors in the room. The kindergarten teachers seemed to feel more comfortable with visitors, 27.5% of them stating that they felt it enhanced the program, versus 3.1% of the first grade teachers. Within the kindergarten group, 20.8% of the teachers in the new schools felt it enhanced their program. It may be that having the laboratory with its variety of stations and innovations affected this response in a positive way.

The sections on writing for both grades showed generally, teachers feel they are carrying out the program as planned. This is displayed in the large percentage checking "always" or "often" on items such as "Students practice their writing daily." In some items, such as in response to "Students edit their writing," the mean was between "sometimes" and "often" but still above average on a 5-point scale.

In items asking for the number of sentences in stories, the number of syllables in words, and the level of students on the 10 stage writing scale, teachers reported having students in all categories. Kindergarten teachers who were experienced in the program tended to bring students along a little faster than teachers new to the program, but all indicated that their students were generally performing well, as did first grade teachers.

On items related to belief in the program, commitment to it, enjoyment and comfortableness in using it, all groups of teachers checked above average but the kindergarten teachers' mean was higher. For example, there was a significant difference between kindergarten and first grade teachers on the following items: Students learn well from the program; I am committed to the program.

The language section dealt mainly with the use of language development games in the classroom. The questionnaires showed that such games were used to a great extent by both kindergarten and first grade teachers to reinforce skills such as vocabulary development, writing and phonemes, making rhyming words, and understanding vowels and consonants. Experienced kindergarten

teachers indicated that they used more games than new Writing to Read teachers, but the new teachers still showed that they made excellent use of these devices. The games generally were developed by the teachers, themselves.

The typing section for kindergarten teachers showed that most of the teachers were making good use of these adjuncts and that their students have learned the related skills such as putting in their own paper, using the return key and the on/off switch.

The management system questions for kindergarten teachers were concerned with work in the Writing to Read labs. Responses to these questions showed a high degree of faithfulness in following the program. Over 90% of the teachers, both experienced and new, checked "always" or "often" on all items, indicating, for example, that students work in pairs, use progress charts, use work journals, complete cycles including mastery tests, and complete make-words activities.

Items for kindergarten teachers concerning aides showed that excellent use is being made of these helpers. Items for first grade teachers on lessons developed during the summer indicated that the teachers found them to be effective with the students and helpful in developing their own lessons.

Thus, the questionnaires verified the findings of the innovation configurations and the Levels of Use interviews - that the processes necessary to having a successful program, in general, were occurring.

Norm Referenced Test

Scores of both kindergarten students and first grade students in the program showed a significant increase over those in the comparison groups on the reading and language subtests of the Metropolitan Achievement Test.

The following charts show mean scores that have been converted from NCE scores to percentiles, for both reading and language, at both kindergarten and first grade levels, with results of tests of statistical significance.

Kindergarten	Reading *		Language *	
Group	Number	Percentile Score	Number	Percentile Score
Writing to Read	500	76	512	76
Comparison	245	56	266	62

* $p < .05$

First grade students in the program showed higher posttest percentile scores on the Metropolitan Achievement Test than a comparison group of first grade students who did not receive the program.

First Grade Group	Reading *		Language *	
	Number	Percentile Score	Number	Percentile Score
Writing to Read	402	46	385	58
Comparison	335	35	332	42

* $p < .05$

The results show that the Writing to Read program had a significant effect on the reading and language scores of students in both kindergarten and first grade. Without special intervention, percentile scores generally stay about the same but, as can be seen in the above charts, Writing to Read students' percentiles were higher than the comparison group in both subjects and at both grade levels.

DCPS Writing Sample Scale

The first sample of the Scale was collected in December 1985 from students in both kindergarten and first grade in both the Writing to Read and the comparison groups. The randomly selected sample included 411 December kindergartners, 128 December comparison students, 319 May kindergartners, and 137 May comparison students.

The kindergartners in the project group were well into writing when December samples were taken. There was at least one student in each stage from 1 through 8 with a mean of 2.3 whereas the comparison group students ranged from stage 1 through 4, with a mean of 1.71. By May the gap had widened. Project students were represented in stages 2 through 10 with a mean of 4.84, while the comparison students ranged from 1 through 7 with a mean of 2.84.

Similar differences were found with first graders. In December, project students were represented in stages 1 through 9 with a mean of 4.19 while comparison students were in 1 through 5 with a mean of 2.56. By May, project students ranged from stages 3 through 10 with a mean of 6.91 while comparison students ranged from stages 2 through 7 with a mean of 3.68.

In all cases, the means of the Writing to Read students were at higher stages than those of the comparison groups, with significant differences shown in the analyses.

Summary

The PMI Summary (Planning, Monitoring and Implementing) Model was used to carry out this evaluation. In Objective A, all intended inputs were in agreement with the corresponding observed input, with staff and students in place, sufficient equipment, materials, space and time. All except one process were in agreement including preparation, training, presentation of the program, and collection of data. The only discrepancy was in the refinement of the curriculum guide which did not take place due to budget cuts. However, since there was a board recommendation that a writing guide was to be developed by

the Instructional Services Center, this discrepancy did not interfere with the progress of the program. Both outcomes showed agreement that was demonstrated, through both Levels of Use ratings and questionnaires.

Objective B showed agreement in all inputs, processes, and outcomes. Criteria were established and used for selecting the students to participate in the study; instruments to measure success were selected; the prescribed program was followed, students were assessed as planned, and assessment results showed differences between project and comparison students in favor of the Writing to Read group, both on norm-referenced and Writing Sample Tests, for both grades.

The process evaluations demonstrated some differences between teachers experienced in the program and those new to the program, but the differences apparently had no great effect on the performance outcomes. Differences were also found between kindergarten teachers and first grade teachers, but again, the first grade teachers demonstrated that their students could perform significantly higher than the comparison group.

The question may arise as to why the scores of project first grade students were not even higher, and this question needs to be examined. There are several possible reasons for consideration. One - the first grade program does not have use of the lab. Much of the learning may take place through use of computers, typewriters, tape recorders, and other such equipment, and aides. Two - this is the first year that Writing to Read help was provided to first grade teachers. The staff was spread thinly with 12 new kindergarten groups. Three - the Metropolitan Achievement Test, though the only one available that measured language at early levels, may not be compatible with the DCPS curriculum. Some changes in the first grade program could test the validity of these ideas.

These possibilities present suggestions for future studies. With such a good data base all stored on dBase III records, a long range study could produce data to show the longevity of the effects, especially if more emphasis can be given to working with the teachers receiving the trained students.

This ends the abridged report. The complete report includes the PMI reporting forms and appendixes.

PLANNING, MONITORING, AND IMPLEMENTING (PMI) EVALUATION MODEL FOR DECISION MAKING

The evaluation of the Writing to Read program followed the Planning, Monitoring, and Implementing (PMI) Evaluation Model for Decision-Making which was developed by the Division of Quality Assurance, District of Columbia Public Schools. (See Appendix A.) The evaluation design, cooperatively developed with the project director and consultant at the beginning of the project year, consisted of the intended inputs, processes, and outcomes outlined on specially designed status report forms.

Based on evidence produced for each item, agreements and discrepancies between intended and observed inputs, processes and outcomes are indicated with accompanying descriptions in the observed column, for each objective. Supporting data are included in the appendices.

FINAL EVALUATION REPORT

PLANNING, MONITORING, AND IMPLEMENTING (PMI)
EVALUATION MODEL FOR DECISION MAKING

Reporting Form

Goal: To improve the writing, language development, vocabulary development and, as an extra benefit, the reading, of young children

Objective A: A majority of the DCPS kindergarten and first grade teachers in the Writing to Read program will demonstrate that they are implementing the program as designed, during the 1984-85 school year.

PART I

INPUTS

INTENDED	STATUS	OBSERVED
a. Project coordinator	Agreement	a. The project coordinator, the same one as in previous years, worked closely with the evaluator.
b. Project consultant	Agreement	b. The consultant from a local university, the same one as in previous years, worked closely with the evaluator.
c. Resource teacher	Agreement	c. The resource teacher is new this year having been hired with the expansion of the program. Her tasks were described to the evaluator by the project coordinator.
d. Kindergarten teachers in 27 project schools	Agreement	d. The project coordinator has on file individual school profiles naming the kindergarten teachers in the 27 schools, as examined by the evaluator. See Appendix B.
e. First grade teachers in 15 project schools	Agreement	e. The project coordinator has on file profiles with the names of teachers in the 15 project schools as examined by the evaluator.

OBJECTIVE A

PART I (continued)

INPUTS

INTENDED	STATUS	OBSERVED
f. Writing to Read team composed of pre-primary and primary level teachers with the principal invited	Agreement	f. Team members names are on the Individual School Profiles in the Writing to Read office.
g. Students of kindergarten teachers in 27 project schools	Agreement	g. Names of all kindergarten students in the program are on file in the Writing to Read office.
h. Students of first grade teachers in 15 project schools	Agreement	h. Names of all first grade students are on file in the Writing to Read office.
i. Clerical support	Agreement	i. The project coordinator verified that adequate clerical support is provided through the Division of Educational Technology.
j. Sufficient space for training	Agreement	j. Most of the training was held at the Martin Luther King school which was observed to be sufficient.
k. Sufficient office space for project administration	Agreement	k. Office space was observed at Rabaut Jr. High School to be sufficient.
l. Writing to Read centers in the 27 project schools	Agreement	l. The project coordinator stated that Writing to Read centers were set up in all of the 27 project schools.
m. Three IBM personal computers at each of the original 15 project schools (except two at Murch and two at Syphax), and 4 IBM PC Juniors at the 12 new schools	Agreement	m. All computers were in place. Some sites were observed by evaluators.

OBJECTIVE A

PART I (continued)

INPUTS

INTENDED	STATUS	OBSERVED
n. Six Selectric typewriters (except four at Murch and four at Syphax) in each school	Agreement	n. All typewriters were in place. Some were observed by evaluators while in use.
o. Three tape recorders (except two at Murch and two at Syphax) for the work journal station	Agreement	o. Tape recorders, being used by children at work journal stations were observed by evaluators. Coordinator verified that they were available at all sites.
p. Two tape recorders for the library listening station	Agreement	p. Library listening station tape recorders were verified as being in place.
q. Language development games	Agreement	q. Language development games were observed in use by students.
r. Teacher Guidelines for the Writing to Read system	Agreement	r. Teacher Guidelines were observed at sites and a copy is on file in the DQA.
s. Adequate materials and supplies	Agreement	s. The project coordinator verified that materials and supplies were adequate.
t. Levels of Use (LoU) protocols	Agreement	t. LoU protocols are on file in the DQA office.
u. Released time for staff development	Agreement	u. A memorandum dated December 4, 1985, verified substitute coverage for participation in staff development.

OBJECTIVE A

PART II

PROCESSES

INTENDED	STATUS	OBSERVED
1.1 During the summer 1985, a workshop will be held for all first grade teachers who are able to attend, with a make-up session to be held in January 1986.	Agreement	1.1 Sign-up sheets for the August and January workshops were examined by the evaluator. A copy of the agenda, dated August 5-9, 1985 is on file in the DQA. (See Appendix C.)
1.2 Near the beginning of the school year, the project coordinator will send a letter to all principals advising them of project procedures.	Agreement	1.2 The evaluator examimed a copy of the letter sent to all project principals on September 3, 1985.
1.3 During October, kindergarten teachers, new to the program, will receive a day of training, arranged by the project coordinator.	Agreement	1.3 Training for kindergarten teachers new to the program was held November 4-8, 1985 with attendance verified by sign-up sheets, and content by the agenda. (See Appendix D.)
1.4 During the school year, workshops will be held for all K teachers in the original 15 schools to review procedures, the management system, and evaluation, and to present the strategies for teaching writing.	Agreement	1.4 Workshops were held on January 9 and 10, 1986 to review and present new strategies, as verified by sign-up sheets and content of agenda. (See Appendix E.)
1.5 During the summer of 1986, teachers will refine the writing curriculum guide.	Discrepancy	1.5 Due to budget cuts the refinement of the curriculum guide by this project did not take place. However, since there was a board recommendation that a writing guide was to be developed by the Instructional Services Center, this discrepancy did not interfere with the progress of the program.

† Processes numbered to correspond with outcomes

OBJECTIVE A

PART II (continued)

PROCESSES

INTENDED	STATUS	OBSERVED
1.6 Before November 1, 1985, teachers will work with students in small groups preparing them to work in the Writing to Read center, by showing them and having them practice activities such as how to operate a tape recorder, how to move from station to station, and how to use their work journals.	Agreement	1.6 Observation notes of project personnel verified that classroom preparation took place.
1.7 Teachers will use the Teacher Guidelines provided by the program.	Agreement	1.7 The project coordinator verified that teachers used the manuals. This was also indicated in the Levels of Use (LoU) interviews.
1.8 Beginning in December 1985, teachers in the original 15 schools will present the program to the students in the Writing to Read centers.	Agreement	1.8 Observation notes and LoU interviews verified that teachers in the original schools began presenting the program to students in December 1985.
1.9 Teachers in the additional 12 schools will begin presenting the program as soon as security measures are assured.	Agreement	1.9 Observation notes and LoU interviews showed that teachers in the 12 additional schools began presenting the program between December 1985 and February 1986.
1.10 In November 1985, at the test orientation meeting, project teachers will be informed about evaluator requirements including the spring LoU interviews.	Agreement	1.10 At the Test Orientation Meeting held on November 16, 1985 teachers were informed of testing administrations, LoU interviews, and writing assessments. (See agenda, Appendix F).

† Processes numbered to correspond with outcomes

OBJECTIVE A

PART II (continued)

PROCESSES

INTENDED	STATUS	OBSERVED
1.11 The project coordinator, project consultant or resource teacher will monitor every school program at least twice during the spring semester.	Agreement	1.11 Appendix G shows the monitoring schedule for 1985-86. All project schools were visited at least twice, some three and four times.
1.12 In the spring 1985, ECIA DQA trained personnel will interview a sampling of project teachers, using innovation configuration diagrams and Levels of Use (LoU) rating material.	Agreement	1.12 Project teachers in all regions were interviewed by DQA personnel.
2.1 The project coordinator, project consultant and DQA evaluation personnel will review the teacher questionnaire, and make revisions if needed.	Agreement	2.1 The teacher questionnaires were reviewed and revised by the DQA evaluator with input from the project staff members.
2.2 The project coordinator will distribute the teacher questionnaires in the spring of the 1985-86 school year.	Agreement	2.2 A copy of the questionnaire distribution letter is on file in DQA.
2.3 Project teachers will complete the teacher questionnaires and return them to the project coordinator.	Agreement	2.3 Most of the teachers completed the questionnaire upon receipt but a follow-up letter was sent by the coordinator on May 23, 1986.
2.4 The project coordinator will give the teacher questionnaires to the DQA Evaluation personnel by June 30, 1986 for data analysis.	Agreement	2.4 Completed questionnaires are on file in the DQA.

† Processes numbered to correspond with outcomes

OBJECTIVE A

PART III

OUTCOMES

INTENDED	STATUS	OBSERVED
1. An analysis of interview data completed by the DQA Evaluation personnel by June 1986, will show that a majority of the project kindergarten and first grade teachers interviewed (at least a 50% sample) are implementing the program as designed, measured as follows: a. innovation configuration diagrams will show all areas in the acceptable range; b. Levels of Use (LoU) ratings will be at Level III, IV^{a} or IV^{b} (Mechanical Use, Routine, or Refinement).	Agreement	1. One hundred percent (100%) of the 22 kindergarten teachers and 62% of the 13 first grade teachers were interviewed. a. of the 22 kindergarten teachers, 20 (91%) had acceptable configurations. More of the teachers at both grade levels had ideal rather than merely acceptable configurations. b. LoUs of the 20 kindergarten teachers with acceptable configurations were as follows: Number — Level — Description 1 — 3 — Mechanical 16 — 4A — Routine 2 — 4B — Refinement 1 Incompleted interview LoUs of the 5 first grade teachers with acceptable configurations were as follows: Number — Level — Description 4 — 4A — Routine 1 — 4B — Refinement For a brief explanation of each description, see Appendix H.

OBJECTIVE A

PART III (continued)

OUTCOMES

INTENDED	STATUS	OBSERVED
2. An analysis of results of completed project-designed teacher questionnaires submitted to the DQA by the project coordinator by June 1986 will show that the majority of project teachers state that they are implementing all parts of the program as designed.	Agreement	2. The kindergarten questionnaire was completed by 51 teachers representing 1,261 students, with 27 from the original Writing to Read schools and 24 from the new ones. The first grade questionnaire was completed by 32 teachers representing 809 students. The questionnaires and results are shown in Appendix I. Questionnaire results were positive, showing that the processes necessary to having a successful program in general, were occurring.

FINAL EVALUATION REPORT

PLANNING, MONITORING, AND IMPLEMENTING (PMI)
EVALUATION MODEL FOR DECISION MAKING

Reporting Form

Goal: To improve the writing, language development, vocabulary development, and as an extra benefit, the reading, of young children

Objective B: At the end of one year, students of DCPS kinderarten and first grade teachers using the Writing to Read program, will increase their creative writing achievement at a greater than average rate, as measured by a standardized readiness test and a rated writing instrument.

PART I

INPUTS

INTENDED	STATUS	OBSERVED
Inputs a through o are the same as for Objective B.		
p. Criteria for selecting program and comparison groups for the Writing to Read special study (with total number of students near 1000)	Agreement	p. The head of the assessment section determined the criteria of selecting the comparison schools, using the ECIA Chapter 1 ranking, which includes test scores, socio-economic level, location, and school size.
q. Four schools previously in the program, four schools new to the program, and six comparison schools for the study, selected according to the established criteria	Agreement	q. The 14 selected schools are listed in Appendix J.
r. Project instructional aides, one per center	Agreement	r. The project coordinator verified that each center had an instructional aide.
s. Persons, knowledegable about writing, to serve on the scoring panel	Agreement	s. The scoring panel consisted of knowledgeable personnel from three school districts. See Appendix K.

OBJECTIVE B

PART I (continued)

INPUTS

INTENDED	STATUS	OBSERVED
t. Metropolitan Achievement Tests were available from the assessment section of DQA.	Agreement	t. Metropolitan Achievement tests were available from the Assessment Section of DQA.
u. Writing sample rating instruments are on file in the Writing to Read office. See Appendix L for stages.	Agreement	u. Writing sample rating instruments are on file in the Writing to Read Office. See Appendix L for stages.

OBJECTIVE B

PART II

PROCESSES

INTENDED	STATUS	OBSERVED
1.1 Project students will spend at least one hour per day in the center working on project activities.	Agreement	1.1 In general these activities occurred as verified by observation, questionnaires, LoU interviews, and project monitoring.
1.2 The teacher will perform as a facilitator providing individual assistance as needed.	Agreement	1.2 In general these activities occurred as verified by observation, questionnaires, LoU interviews, and project monitoring.
1.3 The aides will assist the students at the stations as needed.	Agreement	1.3 In general these activities occurred as verified by observation, questionnaires, LoU interviews, and project monitoring.
1.4 The children will follow the prescribed program by working at the computer in pairs, performing follow-up activities at a work journal station, and applying language arts skills at a language development station.	Agreement	1.4 In general these activities occurred as verified by observation, questionnaires, LoU interviews, and project monitoring.
1.5 The project coordinator will arrange an awards program in May to honor the children selected by their Writing to Read team as having achieved the most in writing.	Agreement	1.5 The Third Annual Writer's Award Program was held on May 30, 1986 and attended by the evaluator. A copy of the program is on file in the DQA. See Appendix M for program cover page.

† Processes numbered to correspond with outcomes

OBJECTIVE B

PART II (continued)

PROCESSES

INTENDED	STATUS	OBSERVED
1.6 Special study kindergarten students (project and comparison) will take the Metropolitan Achievement Test (reading and language subtests) December 1985 and again, in the spring of 1986.	Agreement	1.6 Test results are on file in the DQA office.
1.7 Special study first grade students (project and comparison will take the Metropolitan Achievement Test (reading and language subtests) in the spring of 1986.	Agreement	1.7 Test results are on file in the DQA office.
1.8 The project coordinator will provide the DQA with the names and students ID number of all project and comparison students so that test scores can be retrieved from the computer.	Agreement	1.8 Student names and ID numbers are on file in the DQA office.
2.1 Teachers in the special study group will submit, to the project coordinator, three writing samples collected during the weeks of December 1, 1985, March 1, 1986 and May 1, 1986.	Agreement	2.1 Writing samples were examined by the evaluator, and are on file in the Writing to Read office.

† Processes numbered to correspond with outcomes

OBJECTIVE B

PART II (continued)

PROCESSES

INTENDED	STATUS	OBSERVED
2.2 The project coordinator and consultant will establish a panel of raters to score the writing samples, using a project developed instrument.	Agreement	2.2 The panel was established. See Appendix K.
2.3 The project coordinator and consultant will train the raters, practicing until they have reached a reliability coefficient (i.e. of inter-observer agreement) of at least .80.	Agreement	2.3 The project coordinator and consultant trained the panel members on the day of the scoring. The first hour was spent on the training, the second hour on assuring reliability, and the rest of the day on scoring.
2.4 The panel will score samples of writing from the project students and from the matched comparison group.	Agreement	2.4 The panel scored samples of writing from the groups.
2.5 Project coordinator will provide DQA with the rating-scale scores.	Agreement	2.5 The project coordinator submitted the rating scale scores.

† Processes numbered to correspond with outcomes

OBJECTIVE B

PART III

OUTCOMES

INTENDED	STATUS	OBSERVED
1a. Analysis of the results of the Metropolitan Achievement Tests administered in December 1985, and the spring of 1986 will show that kindergarteners using the Writing to Read program increased their achievement at a greater than average rate as follows: i. There will be a positive gain on the Normal Curve Equivalent (NCE) scores from the pretest to the posttest on the language subtest. ii. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the language subtest. iii. There will be a positive gain on the NCE scores from the pretest to the post-test on the reading subtest. iv. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the reading subtest.	Agreement	1a. Kindergartners were tested in November and again in May, but in analyzing results it was shown that the comparison group had a much smaller percentage of students taking both pre- and posttests. Since a t-test of November scores showed no significant difference between the groups, the posttest results were used to indicate differences. Scores of students in the Writing to Read program were significantly higher (at the .05 level) than those in the comparison group in reading and in language as follows: Percentiles Reading / Language Writing to Read: 76 / 76 Comparison: 56 / 62 For more detail, see Appendix N.

OBJECTIVE B

PART III (continued)

OUTCOMES

INTENDED	STATUS	OBSERVED
1b. Analysis of the results of the Metropolitan Readiness Tests administered in the spring of 1985 and the Metropolitan Achievement Test administered in the spring of 1986 will show that first graders using the Writing to Read program increased their achievement at a greater than average rate as follows: i. There will be a positive gain on the Normal Curve Equivalent (NCE) scores from the pretest to the posttest on the language subtest. ii. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the language subtest. iii. There will be a positive gain on the NCE scores from the pretest to the posttest on the reading subtest. iv. NCE scores will show a significant difference (at the .05 level) between project and comparison groups on the reading subtest.	Agreement	1b. A posttest only design was used for first graders who were tested only in May. Scores of students in the Writing to Read program were significantly higher (at the .05 level) than those in the comparison group in reading and language as follows: Percentiles Reading / Language Writing to Read: 46 / 58 Comparison: 35 / 42 For more detail, see Appendix N.

OBJECTIVE B

PART III (continued)

OUTCOMES

INTENDED	STATUS	OBSERVED
2a. Results submitted to the DQA by the project coordinator by June 30, 1986, of findings of a panel of experts trained to rate students' writing samples, will show that kindergarteners using the Writing to Read program increased their writing ability at a greater then average rate as follows:	Agreement	2a. After a thorough search from which no adequate instruments were located to judge the writing samples of young children, the DCPS Writing Sample Scale developed by the project consultant was used to measure improvement in the production of students' creative writing. The scale indicates 10 specific stages. Writing samples were submitted by Writing to Read and comparison group teachers in December 1985 and May 1986. A random sample was selected for scoring. Results were analyzed on the total number of students at each writing stage, testing the significance of the differences between Writing to Read students and comparison students at both times of the year and in both grades, using a t-test, with differences accepted as significant if the t distribution probability was at the .05 level. Statistics were computed using a Lotus 1-2-3 program.

OBJECTIVE B

PART III (continued)

OUTCOMES

INTENDED	STATUS	OBSERVED
2a. (continued)		2a. (continued
i. On sample taken in December and May, graphs will show higher scores for project students than for those of a comparison group.		i. As may be seen in Appendix O, graphed scores of project students were higher than those of the comparison group. Even the two months training before the first measure was taken, had some influence.
ii. Final scores on samples of writing of project students will be significantly higher than those of a comparison group.		ii. In all cases, the means of the Writing to Read students were at higher stages than were those of the comparison groups, with significant differences shown in the analyses. A comparison of the numbers and percents at each stage for both groups at both times of the year are shown in Appendix P. All differences between the two groups were statistically significant.

OBJECTIVE B

PART III (continued)

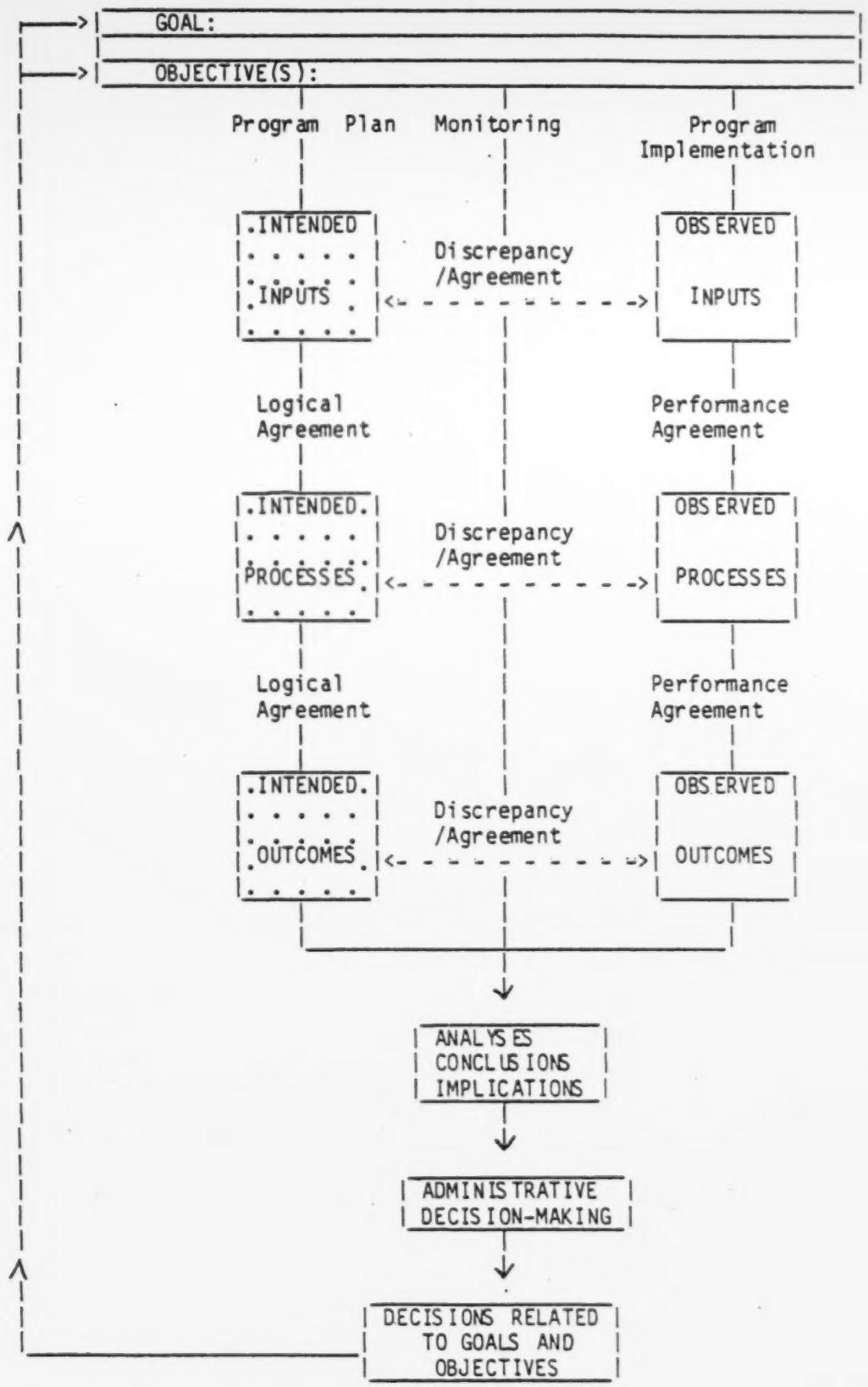
OUTCOMES

INTENDED	STATUS	OBSERVED
2b. Results submitted to the DQA by the project coordinator by June 30, 1986, of findings of a panel of experts trained to rate students' writing samples, will show that first graders using the Writing to Read program increased their writing ability at a greater then average rate as follows:	Agreement	
i. On writing samples taken in December and May, graphs will show higher scores for project students than for those of a comparison group.		i. As may be seen in Appendix O, graphed scores of project students were higher than those of the comparison group. The differences in December reflect the Writing to Read that some of the students had in kindergarten. None of the comparison group had the training.
ii. Final scores on samples of writing of project students will be significantly higher than those of a comparison group.		ii. In all cases, the means of the Writing to Read students were at higher stages than were those of the comparison groups, with significant differences shown in the analyses. A comparison of the numbers and percents at each stage for both groups at both times of the year are shown in Appendix P. All differences between the two groups were statistically significant.

APPENDIX A

PMI EVALUATION MODEL SCHEMA

EVALUATION MODEL SCHEMA



APPENDIX B

INDIVIDUAL SCHOOL PROFILE FORM

Individual School Profile
for
Writing to Read System

1985-1986

Name of School _____

Principal _____ Telephone _____

Building Resource Teacher _____ Room No. _____

Writing to Read Team Leader _____

Writing to Read Aide _____

Kindergarten Teachers	No. of Students	Room No.
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

First Grade Teachers	No. of Students	Room No.
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Please list the names of those teachers who have not been trained.

_____ _____

_____ _____

APPENDIX C

AGENDA - WRITING WORKSHOP FOR
FIRST GRADE TEACHERS

WRITING WORKSHOP FOR

FIRST GRADE TEACHERS

August 5-9, 1985

Agenda

Day 1

Simulation
Purpose of Staff Development
* Writing-Phonetic Approach
* Writing Emphasis
* Superintendent's Mandate
* Availability of W2R Staff

Writing to Read System
* Cycles
* Work Journals
* Writing
* Typing
* Listening

Writing to Read Film

Questions and Answers

Day 2

Diagnosis of Writing Ability

Beginning Writing Strategies

Day 3

Beginning Writing Strategies (continued)

First Grade Writing Strategies

Day 4

First Grade Writing Strategies (continued)

Day 5

Modeling the Process
Evaluation
Process, Workshop and Guide

APPENDIX D

AGENDA - STAFF DEVELOPMENT WORKSHOP
ATTENDED BY KINDERGARTEN TEACHERS
NEW TO THE WRITING TO READ PROGRAM

STAFF DEVELOPMENT WORKSHOP
WRITING TO READ
DISTRICT OF COLUMBIA PUBLIC SCHOOLS

M.L. King, Jr. Elementary — November 4-8, 1985

Day 1

- Overview
- Student Orientation
- Computer
- Work Journal/Library Listening
- Environment
  - Center
  - Classroom
- Local School Team

Day 2

- Writing/Typing
- Make Words
- Management System
- Roles
  - Teacher
  - Parent
  - Aide
  - Principal

Day 3

- Configuration
- Simulation
- Writing Guide
- Kindergarten Writing Strategies

Days 4 and 5

- Construction of Language Development Games
- Hands on Equipment
- Evaluation

Trainers

Thelma H. Oglesby
Resource Teacher

Deloris M. Saunders, Ph.D.
Consultant

Thelma F. Michael
Coordinator

APPENDIX E

AGENDA - KINDERGARTEN STAFF
DEVELOPMENT SESSIONS, MID-YEAR

DISTRICT OF COLUMBIA PUBLIC SCHOOLS

WRITING TO READ

Kindergarten Staff Development Sessions

January 9 & 10, 1986 M.L. King Elementary

Agenda

- Day One

Overview and Program Update
- Objectives of Workshop
- Expansion of Program
- Evaluation
  - national
  - local
  - '85-86'
- Collection of Writing Samples
- Configuration Design

BREAK

Sharing of Writing Success
- Writing Samples
- Strategies Used to Elicit Writing
- Phonetic Approach to Writing

LUNCH

Teaching Young Children to Write
- Beginning Writing Strategies

- Day Two

Teaching Young Children to Write
- Kindergarten Writing Strategies

Writing to Read Center Observation

LUNCH

Writing Strategies (continued)

Wrap-Up
- Long Range Need for Teaching Writing
- Writing Research
- Evaluation

APPENDIX F

AGENDA - TEST ORIENTATION MEETING

EVALUATION OF WRITING TO READ

A G E N D A

NOVEMBER 16, 1985

°	The purpose for the Writing to Read Study	Dr. Saunders
°	Process for selecting participating schools	Dr. V. Ford
°	Administration procedures for the Metropolitan Achievement Test	Dr. V. Ford
°	Guidelines for writing samples	Dr. Saunders
°	Evaluation Methodology	Dr. M. McBeath
°	Procedures for acquired Personal Computer in the Non Writing to Read schools	

APPENDIX G

SCHOOL VISITATIONS BY PROJECT STAFF

DISTRICT OF COLUMBIA PUBLIC SCHOOLS

WRITING TO READ PROGRAM

1985 - 1986

Dates Visited Schools

Adams	-	3-6-86/ 4-8-86	Raymond	-	3-7/ 3-24/ 4-24
Benning	-	3-26/ 4-25	Rudolph	-	4-15/ 4-18/ 4-23
Burrville	-	3-7/ 4-30	Shaed	-	2-6/ 4-21/ 5-2
Emery	-	1-21/ 1-22/ 3-13/ 3-27	Shepherd	-	5-13/ 6-13
Friendship	-	3-14/ 3-17/ 3-18	Stevens	-	2-5/ 4-11/ 5-19
Kimball	-	3-12/ 4-8/ 4-25/ 4-29	Syphax	-	3-28/ 4-12
Lafayette	-	5-20	Thomson	-	1-24/ 4-29/ 5-21
LaSalle	-	1-7/ 4-7/ 4-9/ 4-28/ 4-29	Van Ness	-	4-14/ 6-2
Leckie	-	3-5/ 4-29/ 5-1/ 5-7	Webb	-	1-22/ 1-3
Ludlow-Taylor	-	1-17/ 4-24/ 4-29	Wilson	-	3-27/ 4-17/ 4-25
Martin Luther King	-	4-29/ 5-22	Winston	-	4-16/ 4-24/ 4-29
Murch	-	3-10/ 4-30	Young	-	1-3/ 3-10/ 5-1
Noyes	-	4-14/ 4-22			
Orr	-	3-4/ 3-17/ 4-10/ 5-23			
Randle-Highlands	-	3-18/ 3-21			

T. Michael

APPENDIX H

DESCRIPTIONS OF LoU LEVELS

APPENDIX C

Levels

LEVEL 0: NON-USE: State in which the user has little or no knowledge of the innovation, no involvement with the innovation, and is doing nothing toward becoming involved.

LEVEL 1: ORIENTATION: State in which the user has recently acquired or is acquiring information about the innovation and/or has recently explored or is exploring its value orientation and its demands upon user and user system.

LEVEL 2: PREPARATION: State in which the user is preparing for first use of the innovation.

LEVEL 3: MECHANICAL USE: State in which the user focuses most effort on the short term day-to-day use of the innovation with little time for reflection. Changes in use are made more to meet user needs than client needs. Users is primarily engaged in a stepwise attempt to master the tasks required to use the innovation, often resulting in disjointed and superfical use.

LEVEL 4A: ROUTINE: Use of the innovation is stabilized. Few if any changes are being made in ongoing use. Little preparation or thought is being given to improving innovation use or its consequences.

LEVEL 4B: REFINEMENT: State in which the user varies the use of the innovation to increase the impact on clients within immediate sphere of influence. Variations are based on knowledge of both short and long-term consequences for clients.

LEVEL 5: INTEGRATION: State in which user is combining own efforts to use the innovation with related activities of colleagues to achieve a collective impact on clients within their common sphere of influence.

LEVEL 6: RENEWAL: State in which the user re-evaluates the quality of use of the innovation, seeks major modifications of or alternatives to present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals for self and the system.

APPENDIX I

TEACHER QUESTIONNAIRES AND RESULTS, KINDERGARTEN AND FIRST GRADES

WRITING TO READ PROGRAM
TEACHER SURVEY - FIRST GRADE FORM

NAME _____ SCHOOL _____ GRADE _____ DATE _____

Having visitors in my room during Writing to Read sessions (please check one)

_____ enhanced the program _____ had no noticable effect on the program

_____ inhibited the program _____ (Have had no visitors).

Instructions: Please respond to the following items in terms of your students current performance.

Writing:	Always	Often	Sometimes	Rarely	Never
1. Students practice their writing daily	5	4	3	2	1
2. Students write using their own thoughts and ideas.	5	4	3	2	1
3. Students correct their written work without erasing.	5	4	3	2	1
4. Students edit their writing.	5	4	3	2	1

5. How many students are in your class? _____ (total number)

6. How many students are writing stories of:

__1-3 Sentences __4-7 Sentences __8-11 Sentences __12 or more Sentences

7. How many students in your class are writing words of:

One Syllable___ Two Syllables___ Three Syllables___ Four Syllables___ Five Syllables___

8. How many students are at each of the 15 Stages of Writing?

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
___	___	___	___	___	___	___	___	___	___

	Strongly Agree				Strongly Disagree
9. Students learn well from your Writing to Read Program.	5	4	3	2	1
10. I enjoy using the progam.	5	4	3	2	1
11. I am committed to the program.	5	4	3	2	1
12. I am comfortable with the phonetic spelling emphasis of the program.	5	4	3	2	1

Language Development:

1. How many language development games do you use?

_____ 0 _____ 1-3 _____ 4-6 _____ 7-9 _____ 12-12 _____ More than 12

2. Who developed or contributed the language development games? (Please check all that apply.)

_____ teacher
_____ teacher aide
_____ school
_____ PTA
_____ parent
_____ other (please specify) _____

3. In the first column list the 5 games that in your opinion have the most value for use in your Writing to Read Program and in the second column indicate the skills the game reinforces.

	Language Game	Skills
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Other:

	Always				Never
1. I found the lessons developed during the summer to be effective with the students.	5	4	3	2	1
2. I found the lessons developed during the summer to be helpful in developing my own lessons.	5	4	3	2	1

Comments: _____

_____

_____

_____

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3. What percent of students' stories are written out longhand before they are typed? _____ Percent

4. What percent of student's stories are typed out on the typewriter before being written by hand? _____ Percent

5. On the average, how many times per week do students use the typewriter?

_____ 1 _____ 2 _____ 3 _____ 4 _____ 5

Management System Questions:

	Always	Often	Sometimes	Rarely	Never
1. Students work in pairs.	5	4	3	2	1
2. If students are mismatched, they are re-paired.	5	4	3	2	1
3. Assignment sheets are used appropriately.	5	4	3	2	1
4. Students use progress charts.	5	4	3	2	1
5. Students use work journals.	5	4	3	2	1
6. The class uses the Writing-to-Read Program daily.	5	4	3	2	1
7. Students complete each cycle at the computer.	5	4	3	2	1
8. Students complete each cycle in the work journal.	5	4	3	2	1
9. Progress chart are marked appropriately.	5	4	3	2	1
10. Mastery tests for each cycle are completed.	5	4	3	2	1
11. Make-words activities are completed at the computer.	5	4	3	2	1
12. Make-words activities are completed in the Work Journals.	5	4	3	2	1
13. Complete Work Journals are reviewed by the teacher and sent home.	5	4	3	2	1
14. Students are monitored to see that they do the series of activities for one day's lesson.	5	4	3	2	1

Management System Questions: (continued)

15. How many students are presently working at each of the 10 cycles?

1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

	All	Most	About Half	A Few	None
16. How many students know how to select a tape?	5	4	3	2	1
17. How many students know how to put tape in a recorder?	5	4	3	2	1
18. How many students know how to play a tape?	5	4	3	2	1
19. How many students know how to rewind a tape?	5	4	3	2	1
20. How many students know how to replace tape to storage?	5	4	3	2	1

Aide Questions:

1. Teacher Aides have received training in:

	Yes	No
a. overview of the Writing to Read Program		
b. operation of the computer		
c. handling and storage of computer materials		

	Always	Often	Sometimes	Rarely	Never
2. Teacher Aides handle all computer materials properly.	5	4	3	2	1
3. Teacher Aides monitor record keeping for the computer and work journals.	5	4	3	2	1
4. Teacher Aides help students and answer questions.	5	4	3	2	1
5. Teacher Aides direct the student to the work journal at the end of a computer lesson.	5	4	3	2	1
6. Teacher Aides are supportive to the teacher.	5	4	3	2	1
7. Teacher Aides help in preparation and maintenance of the Writing to Read Lab.	5	4	3	2	1
8. Teacher Aides help the students with equipment and supplies.	5	4	3	2	1

Writing To Read Program
Kindergarten Teacher Survey Results

Teachers New To The Program	Teachers Experienced In The Program	Total Teachers In The Program
N = 24 Teachers	N = 27 Teachers	N = 51 Teachers
N = 593 Students	N = 668 Students	N = 1261 Students

A. The effect on the program of having visitors in the room during Writing to Read sessions:

Total Group											
Enhanced The Program		Had No Effect		Inhibited The Program		No Visitors		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
14	27.5	19	37.3	2	3.9	15	29.4	1	2.0	51	100

Experienced											
Enhanced The Program		Had No Effect		Inhibited The Program		No Visitors		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	33.3	12	44.4	0	0.0	5	18.5	1	3.7	27	100

New											
Enhanced The Program		Had No Effect		Inhibited The Program		No Visitors		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
5	20.8	7	29.2	2	8.3	10	41.7	0	0.0	24	100

B. The current performance of students in writing:

Item Description

1. Students practice their writing daily.
2. Students write using their own thoughts and ideas.
3. Students correct their written work without erasing.
4. Students edit their writing.

Total Group

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Writing daily	36	70.6	12	23.5	2	3.9	0	0.0	0	0.0	1	2.0	51	100	4.68
2. Thoughts/ ideas	25	49.0	19	37.3	6	11.8	1	2.0	0	0.0	0	0.0	51	100	4.33
3. Correct w/o erasing	6	11.8	24	47.1	16	31.4	1	2.0	1	2.0	3	5.9	51	100	3.69
4. Students edit	5	9.8	19	37.3	23	45.1	2	3.9	0	0.0	2	3.9	51	100	3.55

Experienced

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Writing daily	20	74.1	5	18.5	1	3.7	0	0.0	0	0.0	1	3.7	27	100	4.73
2. Thoughts/ ideas	16	59.3	8	29.6	2	7.4	1	3.7	0	0.0	0	0.0	27	100	4.44
3. Correct w/o erasing	4	14.8	15	55.6	7	25.9	0	0.0	1	3.7	0	0.0	27	100	3.78
4. Students edit	4	14.8	10	37.0	11	40.7	1	3.7	0	0.0	1	3.7	27	100	3.65

New

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Writing daily	16	66.7	7	29.2	1	4.2	0	0.0	0	0.0	0	0.0	24	100	4.62
2. Thoughts/ Ideas	9	37.5	11	45.8	4	16.7	0	0.0	0	0.0	0	0.0	24	100	4.21
3. Correct w/o erasing	2	8.3	9	37.5	9	37.5	1	4.2	0	0.0	3	12.5	24	100	3.57
4. Students edit	1	4.2	9	37.5	12	50.0	1	4.2	0	0.0	1	4.2	24	100	3.43

5. How many students are in your class?

	RANGE	MEAN
Total Group	10-30	25
Experienced	10-30	25
New	18-30	25

6. How many students are writing stories of 1-3, 4-7, 8-11, more than 12 sentences?

Total Group (Mean 5.8 sentences)

1 - 3		4 - 7		8 - 11		12+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
345	27.4	421	33.4	191	15.1	101	8.0	203	16.1	1261	100

Experienced (Mean 6.1 sentences)*

1 - 3		4 - 7		8 - 11		12+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
173	25.9	231	34.6	90	13.5	74	11.1	100	15.0	668	100

* See t-test results, next page

New (Mean 5.5 sentences)*

1 - 3		4 - 7		8 - 11		12+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
172	29.0	190	32.0	101	17.0	27	4.6	103	17.4	593	100

7. How many students in your class are writing words of one, two, three, four, five syllables?

Total Group (Mean 2.0 syllables)

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
365	28.9	398	31.6	229	18.2	41	3.3	20	1.6	208	16.5	1261	100

Experienced (Mean 2.2 syllables)**

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
148	22.2	235	35.2	126	18.9	33	4.9	14	2.1	112	16.8	668	100

New (Mean 1.8 syllables)**

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
217	36.6	163	27.5	103	17.4	8	1.3	6	1.0	96	16.2	593	100

* t-test experienced vs. new: t=2.60, significant at .05

** t-test experienced vs. new: t=5.49, significant at .05

8. How many students are at each of the 10 stages of writing?

Stages

Total Group (Mean 5.6 stage)

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	39	11	118	161	140	200	185	135	32	15	225	1261
%	3.1	0.9	9.4	12.8	11.1	15.9	14.7	10.7	2.5	1.2	17.8	100

Experienced (Mean 6.0 stage)*

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	15	3	42	60	80	92	108	80	24	15	149	668
%	2.2	0.4	6.3	9.0	12.0	13.8	16.2	12.0	3.6	2.2	22.3	100

New (Mean 5.2 stage)*

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	24	8	76	101	60	108	77	55	8	0	76	593
%	4.0	1.3	12.8	17.0	10.1	18.2	13.0	9.3	1.3	0.0	12.8	100

* t-test experienced vs. new: t=6.71, significant at .05

Item Description

9. Students learn well from the Writing to Read program.

10. I enjoy using the Writing to Read program.

11. I am committed to the Writing to Read program.

12. I am comfortable with the phonetic spelling emphasis of the Writing to Read program.

Total Group

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
9. Learn well	32	62.7	13	25.5	5	9.8	0	0.0	0	0.0	1	2.0	51	100	4.54
10. Enjoy program	32	62.7	11	21.6	5	9.8	1	2.0	1	2.0	1	2.0	51	100	4.44
11. Committed	35	68.6	10	19.6	4	7.8	0	0.0	1	2.0	1	2.0	51	100	4.56
12. Phonetic Spelling	30	58.8	9	17.6	7	13.7	3	5.9	1	2.0	1	2.0	51	100	4.28

Experienced

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
9. Learn well	18	66.7	7	25.9	2	7.4	0	0.0	0	0.0	0	0.0	27	100	4.59
10. Enjoy program	15	55.6	8	29.6	3	11.1	0	0.0	1	3.7	0	0.0	27	100	4.33
11. Committed	17	63.0	8	29.6	2	7.4	0	0.0	0	0.0	0	0.0	27	100	4.56
12. Phonetic Spelling	16	59.3	5	18.5	4	14.8	2	7.4	0	0.0	0	0.0	27	100	4.30

New

Item	Always No.	Always Pct.	Often No.	Often Pct.	Sometime No.	Sometime Pct.	Rarely No.	Rarely Pct.	Never No.	Never Pct.	No Response No.	No Response Pct.	Total No.	Total Pct.	Mean
9. Learn well	14	58.3	6	25.0	3	12.5	0	0.0	0	0.0	1	4.2	27	100	4.48
10. Enjoy program	17	70.8	3	12.5	2	8.3	1	4.2	0	0.0	1	4.2	27	100	4.57
11. Committed	18	75.0	2	8.3	2	8.3	0	0.0	1	4.2	1	4.2	27	100	4.57
12. Phonetic Spelling	14	58.3	4	16.7	3	12.5	1	4.2	1	4.2	1	4.2	27	100	4.26

C. Language development games in the classroom:

1a. Do you use the "Bingo" language development game?

Total Group

Yes No.	Yes Pct.	No No.	No Pct.	No Response No.	No Response Pct.	Total No.	Total Pct.
31	60.8	18	35.3	2	3.9	51	100

Experienced

Yes No.	Yes Pct.	No No.	No Pct.	No Response No.	No Response Pct.	Total No.	Total Pct.
17	63.0	10	37.0	0	0.0	27	100

New

Yes No.	Yes Pct.	No No.	No Pct.	No Response No.	No Response Pct.	Total No.	Total Pct.
14	58.3	8	33.3	2	8.3	24	100

1b. Do you use the "make word" language development game?

Total

Yes		No		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
43	84.3	6	11.8	2	3.9	51	100

*

Experienced

Yes		No		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
26	96.3	1	3.7	0	0.0	27	100

*

New

Yes		No		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
17	70.0	5	20.8	2	8.3	24	100

* Chi-Square experienced vs. new = 4.083, significant at .05

2. How many language development games do you use?

Total Group (Mean 5.5 games)

0		1 - 3		4 - 6		5 - 7		8 - 10		11+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
2	3.9	14	27.5	11	21.6	10	19.6	3	5.9	9	17.6	2	3.9	51	100

Experienced (Mean 7.0 games)*

0		1 - 3		4 - 6		5 - 7		8 - 10		11+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	3.7	5	18.5	2	7.4	7	25.9	3	11.1	9	33.3	0	0.0	27	100

New (Mean 3.7 games)*

0		1 - 3		4 - 6		5 - 7		8 - 10		11+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	4.2	9	37.5	9	37.5	3	12.5	0	0.0	0	0.0	2	8.3	24	100

3. Who developed or contributed the language development games? (Check all that apply.)

Total Group

	Teacher		Teacher Aide		School		PTA		Parent		Other		No Response	
Percent of 51 teachers	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
	47	92.2	40	78.4	14	27.5	7	13.7	5	9.8	2	3.9	3	5.9

* t-test experienced vs. new: t=5.57, significant at .05

Experienced

Percent of 27 teachers	Teacher *		Teacher Aide		School		PTA		Parent		Other		No Response	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
	27	100.0	20	74.1	7	25.9	2	7.4	2	7.4	0	0.0	0	0.0

New

Percent of 24 teachers	Teacher *		Teacher Aide		School		PTA		Parent		Other		No Response	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
	20	83.3	20	83.3	7	29.2	5	20.8	3	12.5	2	8.3	3	12.5

4. In the first column list the 5 games that in your opinion have the most value for use in the Writing-to-Read program and in the second column indicate the skills the game reinforces.

NOTE: The following lists show the names of games as indicated by teachers, the frequency of the listings, and the skills generally mentioned as being reinforced by the games. The lists are separated according to teacher category, i.e. experienced and new.

* Significance of difference between two proportions, experienced vs. new: Z=2.77, significant at .05

6

Experienced

Language Game	Number of Times Listed	Skills
Make words	18	Developing understanding of position of consonants, reviewing the phonemes, alphabetic order, words with pictures
Word Bingo	13	Indentifying words
Rhyming Games	10	Making rhyming words
Concentration	6	Improving visual matching, memory
Alphabet Bingo	5	Identifying upper/lower case letters
Syllable game	4	Identifying the number of syllables in words, developing listening skills
Vowel Bingo	4	Naming and identifying sounds
Rhyming Bingo	3	Discriminating (auditory/ visual)
Word puzzles	3	Improving visual discrimination, word recognition
Hear-see-say sounds	2	Practicing initial-middle-ending consonant sounds
Order	2	Comprehending sentence structure
Put in order	2	Developing skill in sequencing
Sounds we know	2	Reviewing beginning and ending sounds

Language Game	Number of Times Listed	Skills
Unscrambling sentences	2	Comprehending sentence structure
Consonant Bingo	1	Naming and identifying sounds
Consonant sounds	1	Reviewing consonant sounds
Creating stories	1	Developing language ideas
Do you Know the sounds	1	Reviewing beginning positions
If	1	Improving word understanding and vocabulary.
Language charts	1	Matching words
Make sentence game	1	Recognizing a complete thought
Matching pictures and words	1	Reviewing consonant and vowel sounds; blending
Medial sounds	1	Reviewing medial sound-syllables
Picture Charts	1	Recognizing words
Sound game	1	Identifying sounds with pictures
The Vowel Sounds	1	Developing the vowel sounds
Vowel Tic-Tac-Toe	1	Improving auditory/visual discrimination
Word Research	1	Matching, beginning sounds visually
Write On!	1	Developing ideas, language emphasis

Language Game	Number of Times Listed	New Skills
Rhyming Bingo	10	Developing rhyming vocabulary
Make Word Game	8	Reinforcing phomenes with picture cards
Picture/Word Bingo	8	Developing vocabulary
Alphabet Game	6	Recognizing letters
Sequence Cards	5	Classifying, putting in order
Favorite Stories	3	Putting pictures in sequence
Sound/Vowel Bingo	3	Developing initial, terminal, medial sounds, diagraphs, blends,
Blending Sounds	2	Identifying different blends
Flannel Board Letters	2	Reinforcing words, sounds, and sentences
Letter and Alphabet Sets	2	Developing letter discrimination
Picture File	2	Working with story starters
Word Meaning	2	Associating words with pictures
Word/picture Puzzles	2	Developing vocabulary/phonics
Color Game	1	Identifying color words
Exercise games	1	Developing spatial relationship
Fishing	1	Matching words
Magnetic Letters	1	Reinforcing words, sounds, and sentences

Language Game	Number of Times Listed	Skills
Match	1	Identifying initial, vowel, ending sounds
Picture Match	1	Selecting work for given picture
Puppet Shows	1	Developing language
Sequence Bingo	1	Reinforcing words and sounds
Sight Words	1	Building a vocabulary of words understood at sight
Tell-Again Story Cards	1	Recalling, retelling stories, comprehending oral expression
Word Card	1	Developing cognitive skills

D. Typing Questions:

1. How often do the students use the typewriter?

Total Group (Mean 4.42)

Always		Often		Sometime		Rarely		Never		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
22	43.1	24	47.1	2	3.9	0	0.0	0	0.0	3	5.9	51	100

Experienced (Mean 4.50)

Always		Often		Sometime		Rarely		Never		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
13	48.1	13	48.1	0	0.0	0	0.0	0	0.0	1	3.7	27	100

New (Mean 4.32)

Always		Often		Sometime		Rarely		Never		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	37.5	11	45.8	2	8.3	0	0.0	0	0.0	2	8.3	24	100

2.

a. How many students use the typewriter?
b. How many students put in their own paper?
c. How many students use the space bar correctly?
d. How many students use the upper/lower case key?
e. How many students use the on/off switch by themselves?
f. How many students use the return key?

Total Group

Item	All		Most		About Half		A Few		None		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
a. Use typewriter	33	64.7	12	23.5	3	5.9	2	3.9	0	0.0	1	2.0	51	100	4.52
b. Put in own paper	19	37.3	22	43.1	4	7.8	3	5.9	1	2.0	2	3.9	51	100	4.12
c. Use space bar	10	19.6	21	41.2	15	29.4	3	5.9	1	2.0	1	2.0	51	100	3.72
d. Use upper/ lower key	5	9.8	22	43.1	14	27.5	8	15.7	1	2.0	1	2.0	51	100	3.44
e. Use on/off switch	41	80.4	5	9.8	2	3.9	2	3.9	0	0.0	1	2.0	51	100	4.70
f. Use return key	20	39.2	21	41.2	6	11.8	3	5.9	0	0.0	1	2.0	51	100	4.16

Experienced

Item	All		Most		About Half		A Few		None		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
a. Use typewriter	20	74.1	7	25.9	0	0.0	0	0.0	0	0.0	0	0.0	27	100	* 4.74
b. Put in own paper	11	40.7	14	51.9	1	3.7	0	0.0	1	3.7	0	0.0	27	100	4.26
c. Use space bar	7	25.9	13	48.1	6	22.2	1	3.7	0	0.0	0	0.0	27	100	* 3.96
d. Use upper/ lower key	3	11.1	13	48.1	8	29.6	3	11.1	0	0.0	0	0.0	27	100	3.59
e. Use on/off switch	22	81.5	4	14.8	1	3.7	0	0.0	0	0.0	0	0.0	27	100	4.78
f. Use return key	12	44.4	12	44.4	3	11.1	0	0.0	0	0.0	0	0.0	27	100	4.33

* see t-test results, next page

New

Item	All		Most		About Half		A Few		None		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
a. Use typewriter	13	54.2	5	20.8	3	12.5	2	8.3	0	0.0	1	4.2	24	100	* 4.26
b. Put in own paper	8	33.3	8	33.3	3	12.5	3	12.5	0	0.0	2	8.3	24	100	3.96
c. Use space bar	3	12.5	8	33.3	9	37.5	2	8.3	1	4.2	1	4.2	24	100	** 3.43
d. Use upper/ lower key	2	8.3	9	37.5	6	25.0	5	20.8	1	4.2	1	4.2	24	100	3.26
e. Use on/off switch	19	79.2	1	4.2	1	4.2	2	8.3	0	0.0	1	4.2	24	100	4.61
f. Use return key	8	33.3	9	37.5	3	12.5	3	12.5	0	0.0	1	4.2	24	100	3.96

3. What percent of students stories are written out in longhand before they are typed?

Median Percents

Total Group	Experienced	New
95	95	100

4. What percentage of students stories are typed out on the typewriter before being written by hand?

Median Percents

Total Group	Experienced	New
0	0.5	0

* t-test experienced vs. new: t=2.23, significant at .05

** t-test experienced vs. new: t=2.08, significant at .05

5. On the average, how many times per week do students use the typewriter?

Total Group (Mean 3.66)

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
2	3.9	2	3.9	17	33.3	19	37.3	10	19.6	1	2.0	51	100

Experienced (Mean 3.56)

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	3.7	2	7.4	9	33.3	11	40.7	4	14.8	0	0.0	27	100

New (Mean 3.78)

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	4.2	0	0.0	8	33.3	8	33.3	6	25.0	1	4.2	24	100

E. Management System Questions:

Item Descriptions

1. Students work in pairs.
2. If students are mismatched, they are re-paired.
3. Assignment sheets are used appropriately.
4. Students use progress charts.
5. Students use work journals.
6. The class uses the Writing to Read program daily.
7. Students complete each cycle at the computer.
8. Students complete each cycle in the work journal.
9. Progress charts are marked appropriately.
10. Mastery tests for each cycle are completed.
11. Make-words activities are completed at the computer.
12. Make-words activities are completed in the Work Journals.
13. Complete Work Journals are reviewed by the teacher and sent home.
14. Students are monitored to see that they do the series of activities for one day's lesson.

Total Group

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Work in pairs	26	51.0	24	47.1	0	0.0	0	0.0	0	0.0	1	2.0	51	100	4.48
2. Re-paired	36	70.6	10	19.6	3	5.9	0	0.0	0	0.0	2	3.9	51	100	4.67
3. Assignment sheets	35	68.6	9	17.6	2	3.9	2	3.9	0	0.0	3	5.9	51	100	4.60
4. Progress charts	27	52.9	12	23.5	4	7.8	5	9.8	0	0.0	3	5.9	51	100	4.27
5. Work journals	50	98.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	51	100	5.00
6. W2R daily	44	86.3	2	3.9	2	3.9	0	0.0	0	0.0	3	5.9	51	100	4.87
7. Cycle-computer	45	88.2	2	3.9	2	3.9	0	0.0	1	2.0	1	2.0	51	100	4.80
8. Cycle-journal	45	88.2	3	5.9	2	3.9	0	0.0	0	0.0	1	2.0	51	100	4.86

Total Group (Continued)

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
9. Charts marked	39	76.5	11	21.6	0	0.0	0	0.0	0	0.0	1	2.0	51	100	4.78
10. Mastery tests	46	90.2	4	7.8	0	0.0	0	0.0	0	0.0	1	2.0	51	100	4.92
11. Words at computer	39	76.5	6	11.8	1	2.0	0	0.0	1	2.0	4	7.8	51	100	4.74
12. Words in journals	39	76.5	7	13.7	2	3.9	0	0.0	0	0.0	3	5.9	51	100	4.77
13. Journals home	45	88.2	3	5.9	0	0.0	0	0.0	0	0.0	3	5.9	51	100	4.94
14. Monitored	43	84.3	7	13.7	0	0.0	0	0.0	0	0.0	1	2.0	51	100	4.86

Experienced

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Work in pairs	14	51.9	13	48.1	0	0.0	0	0.0	0	0.0	0	0.0	27	100	4.52
2. Re-paired	24	88.9	2	7.4	0	0.0	0	0.0	0	0.0	1	3.7	27	100	4.92 *
3. Assignment sheets	21	77.8	3	11.1	1	3.7	2	7.4	0	0.0	0	0.0	27	100	4.59
4. Progress Charts	15	55.6	5	18.5	2	7.4	4	14.8	0	0.0	1	3.7	27	100	4.19
5. Work journals	27	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	27	100	5.00
6. W2R daily	25	92.6	1	3.7	1	3.7	0	0.0	0	0.0	0	0.0	27	100	4.93
7. Cycle-computer	24	88.9	1	3.7	2	7.4	0	0.0	0	0.0	0	0.0	27	100	4.81
8. Cycle-journal	24	88.9	1	3.7	2	7.4	0	0.0	0	0.0	0	0.0	27	100	4.81
9. Charts marked	22	81.5	5	18.5	0	0.0	0	0.0	0	0.0	0	0.0	27	100	4.81
10. Mastery tests	25	92.6	2	7.4	0	0.0	0	0.0	0	0.0	0	0.0	27	100	4.93
11. Words at computer	22	81.5	3	11.1	1	3.7	0	0.0	1	3.7	0	0.0	27	100	4.67
12. Words in journals	22	81.5	4	14.8	1	3.7	0	0.0	0	0.0	0	0.0	27	100	4.78
13. Journals home	25	92.6	1	3.7	0	0.0	0	0.0	0	0.0	1	3.7	27	100	4.96
14. Monitored	24	88.9	3	11.1	0	0.0	0	0.0	0	0.0	0	0.0	27	100	4.89

* See t-test result, next page

New

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Work in pairs	12	50.0	11	45.8	0	0.0	0	0.0	0	0.0	1	4.2	24	100	4.52
2. Re-paired	12	50.0	8	33.3	3	12.5	0	0.0	0	0.0	1	4.2	24	100	4.39 *
3. Assignment sheets	14	58.3	6	25.0	1	4.2	0	0.0	0	0.0	3	12.5	24	100	4.62
4. Progress Charts	12	50.0	7	29.2	2	8.3	1	4.2	0	0.0	2	8.3	24	100	4.36
5. Work journals	23	95.8	0	0.0	0	0.0	0	0.0	0	0.0	1	4.2	24	100	5.00
6. W2R daily	19	79.2	1	4.2	1	4.2	0	0.0	0	0.0	3	12.5	24	100	4.81
7. Cycle-computer	21	87.5	1	4.2	0	0.0	0	0.0	1	4.2	1	4.2	24	100	4.78
8. Cycle-journal	21	87.5	2	8.3	0	0.0	0	0.0	0	0.0	1	4.2	24	100	4.91
9. Charts marked	17	70.8	6	25.0	0	0.0	0	0.0	0	0.0	1	4.2	24	100	4.74
10. Mastery tests	21	87.5	2	8.3	0	0.0	0	0.0	0	0.0	1	4.2	24	100	4.91
11. Words at computer	17	70.8	3	12.5	0	0.0	0	0.0	0	0.0	4	16.7	24	100	4.85
12. Words in journals	17	70.8	3	12.5	1	4.2	0	0.0	0	0.0	3	12.5	24	100	4.76
13. Journals home	20	83.3	2	8.3	0	0.0	0	0.0	0	0.0	2	8.3	24	100	4.91
14. Monitored	19	79.2	4	16.7	0	0.0	0	0.0	0	0.0	1	4.2	24	100	4.83

* t-test experienced vs. new: t=3.49, significant at .05

15. How many students are presently working at each of the 10 cycles?

Total Group (Mean 4.8 cycle)

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	36	141	166	218	133	123	116	42	68	38	180	1261
%	2.9	11.2	13.2	17.3	10.5	9.8	9.2	3.3	5.4	3.0	14.3	100

Experienced (Mean 5.6 cycle)*

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	15	34	64	102	96	74	62	37	65	37	82	668
%	2.2	5.1	9.6	15.3	14.4	11.1	9.3	5.5	9.7	5.5	12.3	100

New (Mean 3.9 cycle)*

	1	2	3	4	5	6	7	8	9	10	No Response	Total
#	21	107	102	116	37	49	54	5	3	1	98	593
%	3.5	18.0	17.2	19.6	6.2	8.3	9.1	0.8	0.5	0.2	16.5	100

* t-test experienced vs. new: t=13.04, significant at .05

16. How many students know how to select a tape?
17. How many students know how to put tape in a recorder?
18. How many students know how to play a tape?
19. How many students know how to rewind a tape?
20. How many students know how to replace tape to storage?

Total Group

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
16. Select tape	12	23.5	22	43.1	9	17.6	5	9.8	1	2.0	2	3.9	51	100	3.80
17. Put on tape	13	25.5	21	41.2	12	23.5	3	5.9	1	2.0	1	2.0	51	100	3.84
18. Play tape	17	33.3	22	43.1	6	11.8	4	7.8	1	2.0	1	2.0	51	100	4.00
19. Rewind tape	13	25.5	21	41.2	9	17.6	4	7.8	3	5.9	1	2.0	51	100	3.74
20. Replace tape	15	29.4	13	25.5	14	27.5	5	9.8	3	5.9	1	2.0	51	100	3.64

Experienced

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
16. Select tape	7	25.9	13	48.1	4	14.8	1	3.7	1	3.7	1	3.7	27	100	3.92
17. Put on tape	6	22.2	14	51.9	6	22.2	0	0.0	1	3.7	0	0.0	27	100	3.89
18. Play tape	9	33.3	13	48.1	2	7.4	2	7.4	1	3.7	0	0.0	27	100	4.00
19. Rewind tape	6	22.2	11	40.7	5	18.5	3	11.1	2	7.4	0	0.0	27	100	3.59
20. Replace tape	9	33.3	8	29.6	7	25.9	1	3.7	2	7.4	0	0.0	27	100	3.78

New

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
16. Select tape	5	20.8	9	37.5	5	20.8	4	16.7	0	0.0	1	4.2	24	100	3.65
17. Put on tape	7	29.2	7	29.2	6	25.0	3	12.5	0	0.0	1	4.2	24	100	3.78
18. Play tape	8	33.3	9	37.5	4	16.7	2	8.3	0	0.0	1	4.2	24	100	4.00
19. Rewind tape	7	29.2	10	41.7	4	16.7	1	4.2	1	4.2	1	4.2	24	100	3.91
20. Replace tape	6	25.0	5	20.8	7	29.2	4	16.7	1	4.2	1	4.2	24	100	3.48

F. Aide questions:

1. Teacher Aides have received training in

   a. overview of the Writing to Read program
   b. operation of the computer
   c. handling and storage of computer materials

Total Group

	Yes		No		No Response		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
a.	44	86.3	2	3.9	5	9.8	51	100
b.	44	86.3	2	3.9	5	9.8	51	100
c.	44	86.3	2	3.9	5	9.8	51	100

Experienced

	Yes		No		No Response		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
a.	23	85.2	1	3.7	3	11.1	27	100
b.	23	85.2	1	3.7	3	11.1	27	100
c.	23	85.2	1	3.7	3	11.1	27	100

New

	Yes		No		No Response		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
a.	21	87.5	1	4.2	2	8.3	24	100
b.	21	87.5	1	4.2	2	8.3	24	100
c.	21	87.5	1	4.2	2	8.3	24	100

Item Description

2. Teacher Aides handle all computer materials properly.
3. Teacher Aides monitor record keeping for the computer and work journals.
4. Teacher Aides help students and answer questions.
5. Teacher Aides direct the student to the work journal at the end of a computer lesson.
6. Teacher Aides are supportive to the teacher.
7. Teacher Aides help in prepration and maintenance of the Writing to Read Lab.
8. Teacher Aides help the students with equipment and supplies.

Total Group

Item	Always		Often		Sometime		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
2. Use of materials	40	78.4	5	9.8	1	2.0	0	0.0	0	0.0	5	9.8	51	100	4.85
3. Monitor records	35	68.6	24	7.8	5	9.8	1	2.0	1	2.0	5	9.8	51	100	4.54
4. Help students	34	66.7	8	15.7	3	5.9	1	2.0	1	2.0	4	7.8	51	100	4.55
5. Dir. to journal	38	74.5	5	9.8	4	7.8	0	0.0	0	0.0	4	7.8	51	100	4.72
6. Supportive	40	78.4	2	3.9	3	5.9	1	2.0	0	0.0	5	9.8	51	100	4.76
7. Help in lab	39	76.5	2	3.9	4	7.8	1	2.0	0	0.0	5	9.8	51	100	4.72
8. Equipment/ supplies	38	74.5	6	11.8	1	2.0	1	2.0	1	2.0	4	7.8	51	100	4.68

Experienced

Item	Always No.	Always Pct.	Often No.	Often Pct.	Sometime No.	Sometime Pct.	Rarely No.	Rarely Pct.	Never No.	Never Pct.	No Response No.	No Response Pct.	Total No.	Total Pct.	Mean
2. Use of materials	20	74.1	3	11.1	1	3.7	0	0.0	0	0.0	3	11.1	27	100	4.79
3. Monitor records	16	59.3	3	11.1	4	14.8	1	3.7	0	0.0	3	11.1	27	100	4.42
4. Help students	17	63.0	5	18.5	2	7.4	1	3.7	0	0.0	2	7.4	27	100	4.52
5. Dir. to journal	19	70.4	4	14.8	2	7.4	0	10.0	0	0.0	2	7.4	27	100	4.68
6. Supportive	21	77.8	2	7.4	2	7.4	0	0.0	0	0.0	2	7.4	27	100	4.76
7. Help in lab	21	77.8	2	7.4	1	3.7	1	3.7	0	0.0	2	7.4	27	100	4.72
8. Equipment/ supplies	19	70.4	5	18.5	0	0.0	1	3.7	0	0.0	2	7.4	27	100	4.68

New

2. Use of materials	20	83.3	2	8.3	0	0.0	0	0.0	0	0.0	2	8.3	24	100	4.91
3. Monitor records	19	79.2	1	4.2	1	4.2	0	0.0	1	4.2	2	8.3	24	100	4.68
4. Help students	17	70.8	3	12.5	1	4.2	0	0.0	1	4.2	2	8.3	24	100	4.59
5. Dir. to journal	19	79.2	1	4.2	2	8.3	0	0.0	0	0.0	2	8.3	24	100	4.77
6. Supportive	19	79.2	0	0.0	1	4.2	1	4.2	0	0.0	3	12.5	24	100	4.76
7. Help in lab	18	75.0	0	0.0	3	12.5	0	0.0	0	0.0	3	12.5	24	100	4.71
8. Equipment/ supplies	19	79.2	1	4.2	1	4.2	0	0.0	1	4.2	2	8.3	24	100	4.68

WRITING-TO-READ PROGRAM
TEACHER SURVEY - FIRST GRADE FORM

NAME _____ SCHOOL _____ GRADE _____ DATE _____

Having visitors in my room during Writing-to-Read sessions (please check one)

_____ enhanced the program _____ had no noticable effect on the program

_____ inhibited the progam _____ (Have had no visitors).

Instructions: Please respond to the following items in terms of your students current performance.

Writing:	Always	Often	Sometimes	Rarely	Never
1. Students practice their writing daily	5	4	3	2	1
2. Students write using their own thoughts and ideas.	5	4	3	2	1
3. Students correct their written work without erasing.	5	4	3	2	1
4. Students edit their writing.	5	4	3	2	1

5. How many students are in your class? _____ (total number)

6. How many students are writing stories of:

__1-3 Sentences __4-7 Sentences __8-11 Sentences __12 or more Sentences

7. How many students in your class are writing words of:

One Syllable___	Two Syllables___	Three Syllables___	Four Syllables___	Five Syllables___

8. How many students are at each of the 15 Stages of Writing?

____	____	____	____	____	____	____	____	____	____
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th

	Strongly Agree				Strongly Disagree
9. Students learn well from your Writing to Read Program.	5	4	3	2	1
10. I enjoy using the progam.	5	4	3	2	1
11. I am committed to the program.	5	4	3	2	1
12. I am comfortable with the phonetic spelling emphasis of the program.	5	4	3	2	1

Language Development:

1. How many language development games do you use?

   _____ 0 _____ 1-3 _____ 4-6 _____ 7-9 _____ 12-12 _____ More than 12

2. Who developed or contributed the language development games? (Please check all that apply.)

   _____ teacher
   _____ teacher aide
   _____ school
   _____ PTA
   _____ parent
   _____ other (please specify) _____

3. In the first column list the 5 games that in your opinion have the most value for use in your Writing to Read Program and in the second column indicate the skills the game reinforces.

	Language Game	Skills
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Other:

	Always				Never
1. I found the lessons developed during the summer to be effective with the students.	5	4	3	2	1
2. I found the lessons developed during the summer to be helpful in developing my own lessons.	5	4	3	2	1

Comments: _____

_____

_____

_____

031486DQA

WRITING TO READ PROGRAM
First Grade Teacher Survey Results

N = 32 teachers
N = 809 students

A. The effect on the program of having visitors in the room during Writing To Read sessions:*

Enhanced The Program		Had No Effect		Inhibited The Program		No Visitors		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	3.1	6	18.8	3	9.4	22	68.8	0	0.0	32	100

B. The current performance of students in writing:

Item Descriptions

1. Students practice their writing daily.
2. Students write using their own thoughts and ideas.
3. Students correct their written work without erasing.
4. Students edit their writing

Item	Always		Often		Sometimes		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
1. Writing daily	11	34.4	18	56.3	2	6.3	0	0.0	0	0.0	1	3.1	32	100	** 4.29
2. Thoughts/ ideas	12	37.5	11	34.4	9	28.1	0	0.0	0	0.0	0	0.0	32	100	** 4.09
3. Correct w/o error	2	6.3	5	15.6	17	53.1	7	21.9	0	0.0	1	3.1	32	100	** 3.06
4. Edit writing	5	15.6	6	18.8	11	34.4	7	21.9	0	0.0	3	9.4	32	100	** 3.31

5. How many students are in your class?

Range 18 to 30 Mean 25

* Chi square kindergarten vs. first grade = 11.16, significant at .05
** No significant difference from kindergarten means

6. How many students are writing stories of 1-3, 4-7, 8-11, more than 12 sentences?

Mean = 7.0 words*

1 - 3		4 - 7		8 - 11		12+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
181	22.4	285	35.2	179	22.1	131	16.2	33	4.1	809	100

7. How may students in your class are writing words of one, two, three, four five syllables?

Mean = 2.1 syllables**

One		Two		Three		Four		Five		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
244	30.2	259	32.0	176	21.8	47	5.8	12	15	71	8.8	809	100

8. How many students are at each of the 10 stages of writing?

Mean = Stage 6.7***

First		Second		Third		Fourth		Fifth		Sixth	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
8	1.0	16	2.0	38	4.7	25	3.1	62	7.7	98	12.1

Seventh		Eighth		Ninth		Tenth		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
137	16.9	158	19.5	56	6.9	33	4.1	178	22.0	809	100

* Kindergarten mean is 5.8, t=-7.51 difference significant at .05

** Kindergarten mean is 2.0, no significant difference

*** Kindergarten mean is 5.6, t=-9.80, difference significant at .05

Item Description

9. Students learn well from the Writing to Read Program.

10. I enjoy using the program.

11. I am committed to the program.

12. I am comfortable with the phonetic spelling emphasis of the program.

Item	Always		Often		Sometimes		Rarely		Never		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
9. Learn Well	7	21.9	10	31.3	9	28.1	2	6.3	1	3.1	3	9.4	32	100	* 3.69
10. Enjoy Program	8	25.0	7	21.9	11	34.4	3	9.4	0	0.0	3	9.4	32	100	** 3.69
11. Committed	7	21.9	6	18.8	12	37.5	2	6.3	1	3.1	4	12.5	32	100	*** 3.57
12. Phonetic Spelling	10	31.3	10	31.3	8	25.0	1	3.1	1	3.1	2	6.3	32	100	** 3.90

C. Language development games in the classroom:

1. How many language development games do you use?

Mean = 4.5 games**

0		1 - 3		4 - 6		5 - 7		8 - 10		11+		No Response		Total	
No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	3.1	12	37.5	3	9.4	5	15.6	3	9.4	2	6.3	6	18.8	32	100

* Kindergarten mean is 4.54, t=2.08, difference significant at .05

** No significant difference from kindergarten means

*** Kindergarten mean is 4.56, t=2.37, difference significant at .05

2. Who developed or contributed the language development games? (Please check all that apply.)

Percent of 32 Teachers	Teacher *		Teacher Aide **		School ***		PTA ***		Parent ***		Other ***		No Responsee	
	25	78.1	4	12.5	2	6.3	0	0.0	0	0.0	5	15.6	6	18.8

* Kindergarten percent is 92.2, Z=2.10, difference significant at .05

** Kindergarten percent is 78.4, Z=5.06, difference significant at .05

*** No significant difference from kindergarten proportions

3. In the first column list the 5 games that in your opinion have the most value for use in your Writing to Read program and in the second column indicate the skills the game reinforces.

Language Game	Number of Times Listed	Skills
Rhyming words	5	Identifying rhyming words/ pictures
The Vowel Games	4	Using vowels/short vowels
Word Bingo	4	Identifying rhyming words
Concentration	3	Identifying sight words
Make words	3	Reinforcing the writing to read phonemes;
Take off on opposites	3	Identifying opposites
ABC Flash cards	2	Recognizing the alphabet
Building Blocks	2	Constructing compound words
Consonents/sounds discrimination	2	Identifying initial-final consonants
Developing sentences	2	Constructing sentences
Dolch Picture word cards	2	Identifying Dolch Words
Farm Lotto	2	Developing vocabulary
Outrageous Tales	2	Using descriptive words
Phonetic Bingo	2	Matching sounds
Silly sentences	2	
Activity #26, What Rhymes	1	Reinforcing sight vocabulary; oral language
Activity #32, Uses of the Tape Recorder	1	Identifying sounds, consonants and vowels; listening skills.

Language Game	Number of Times Listed	Skills
Activity #34, Writing Descriptive Words	1	Developing and reinforcing vocabulary, communication skills.
Be a Detective	1	Matching sounds with pictures
Checkers	1	Developing recognition of cycle words
Climbing the ladder	1	Constructing missing vowel sounds
Constant Substation	1	Changing first letter, making words
Developing words	1	
Dictation (practice - not a game)	1	Using, writing, spelling sight words
Flannel Board Stories	1	Identifying sequences
Nonsense Game	1	Writing stories using non-sense words
Picture file	1	Interpreting the picture
Punch-Thru cards	1	Identifying sounds
Scrambled pictures	1	Sequencing
Sequential order	1	Arranging pictures and words in order
Spatial Relationship Puzzles	1	Identifying position/ direction
Riddles	1	Using descriptive skills
Unscramble the word	1	
Word order	1	Putting words in order, to make sentences

D. Other:

Item Description

1. I found the lessons developed during the summer to be effective with the students.

2. I found the lessons developed during the summer to be helpful in developing my own lessons.

Item	Strongly Agree								Strongly Disagree		No Response		Total		Mean
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	
Effective Lessons	7	21.9	6	18.8	7	21.9	0	0.0	0	0.0	12	37.5	32	100	4.00
Helpful in Developing	9	28.1	5	15.6	6	18.8	0	0.0	0	0.0	12	37.5	32	100	4.15

APPENDIX J

SCHOOLS IN THE SPECIAL
WRITING TO READ STUDY

WRITING TO READ STUDY

1985-1986

- OLD SCHOOLS
  - KING
  - RAYMOND
  - EMERY
  - ORR
- NEW SCHOOLS
  - STEVENS
  - LA SALLE
  - YOUNG
  - RANDLE HIGHLANDS
- COMPARISON SCHOOLS
  - MC GOGNEY
  - DAVIS
  - TERRELL
  - BURROUGHS
  - HEARST
  - TUBMAN

APPENDIX K

WRITING SCORING PANEL

Writing Scoring Panel

College Professors (2) Early Childhood Education	Howard University
Elementary Supervisor	District of Columbia
Writing to Read Teachers (2)	District of Columbia
Elementary Supervisor	Montgomery County, MD
Language Arts Specialist	Montgomery County, MD

APPENDIX L

DESCRIPTIONS OF STAGES OF
WRITING ON WHICH RATING
INSTRUMENT IS BASED

DISTRICT OF COLUMBIA PUBLIC SCHOOLS

WRITING STAGES CRITERIA

Writing Stages

Stage 1 Prewriting

1. Scribbles
2. Draws undistinguishable pictures
3. Overlaps symbols (collage effect)

Stage 2 Spacial Symbolic

1. Letters are unaligned
2. Spacing is inconsistent
3. Strokes are unsteady
4. Drawings are incomplete
5. Some overlap in symbols and strokes
6. Mixes upper case and lower case
7. Writes one-to-three word stories

Stage 3 Letter Name Recognition

1. Uses lower and upper case interchangeably
2. Aligns letters but not completely evenly
3. Spaces letters
4. Uses own sound systems to write words and symbols
5. Writes own name
6. Writes three-to-five word stories
7. Illustrates without detail
8. Uses inventive spelling

Stage 4 Reproduction of Study Words

1. Writes study words
2. Distinguishes long and short vowels with diacritical marks
3. Writes words as they hear them
4. Mixes upper and lower cases
5. Spaces words
6. Letters are smooth legible
7. Aligns letters evenly
8. Illustrates with greater detail but without button, fingernails, eye lashes, etc.
9. Writes one-to-five sentence stories
10. Uses inventive and phonetic spelling

Stage 5 Graphic/Phonetic Understandings

1. Writes study words and new words
2. Writes three-to-eight sentence stories
3. Writes phonetically
4. Illustrates story theme(s)
5. Uses "x" to edit out words and letters
6. May use multiple ideas in one story
7. Mixes upper and lower case letters
8. Evidences attention to handwriting
9. Uses long vowel diacritical marks

Stage 6 Phonetic Transfer

1. Writes undetermined length sentence stories
2. Writes about personal experiences

3. Uses study words and new words
4. Uses phonetic and conventional spellings about evenly
5. Builds word families
6. Uses two-to-three syllable words
7. Uses periods
8. May write about several ideas

Stage 7 Phonetic Mastery

1. Writes up to two page stories
2. Uses periods and question marks
3. Write stories with two-to-three ideas; usually more than one sentence is dedicated to each idea
4. Evidences phonetic mastery through the use of more conventional than phonetic spellings
5. May use up to four syllable words
6. Evidences the alphabetic principle
7. Uses oral vocabulary more than teacher developed vocabulary

Stage 8 Initial Theme Writing

1. Writes freely about experiences
2. Uses occasional phonetic spellings
3. Writes about relationships
4. Writes about fantasies and dreams
5. Writes about concepts
6. Follows a single theme
7. Writes up to three page compositions
8. Illustrates with detail
9. Uses "high risk" words
10. Creates narratives, prose and rhymes
11. Writes compound and complex sentences

Stage 9 Advanced Theme Writing

1. Writes lengthy stories, books and compositions of up to five pages
2. Writes with phonetic spellings only when unusual words are used
3. Writes about a variety of themes, but only on one theme at a time
4. Organizes material logically, showing sequence where applicable
5. Writes full length sentences
6. Illustrations show completeness in detail

Stage 10 Theme and Content Writing

1. Writes multiple stories
2. Writes books
3. Writes reports
4. Writes narrative content assignments
5. Chooses phonetic spellings for complex words only
6. Uses exclamation marks
7. Uses quotation marks
8. Writes fluently and freely
9. Compositions are original and creative
10. Sentence structure shows functional mastery
11. Content of stories shows depth of perception on the theme

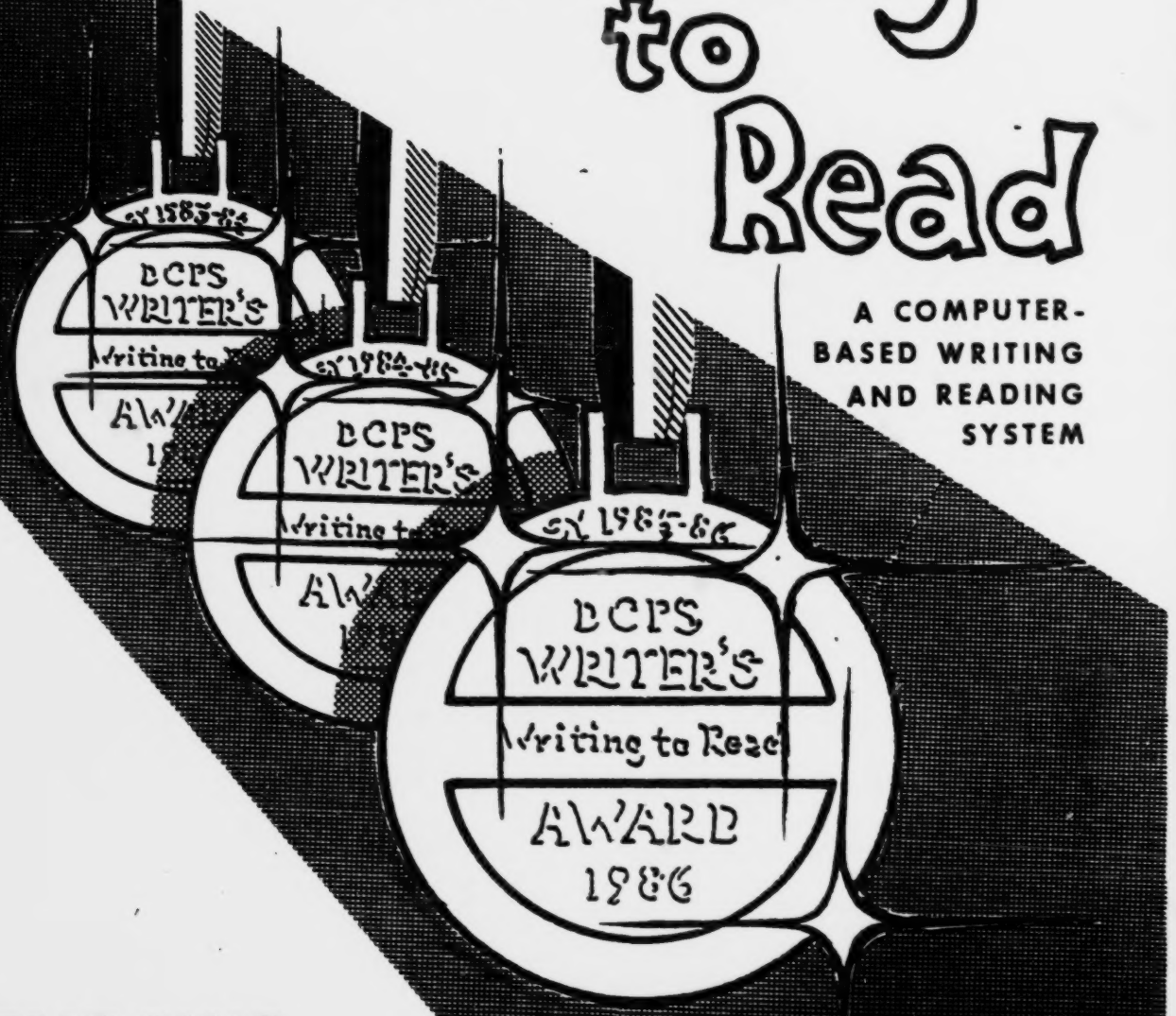
Developed by: Deloris M. Saunders, Ph.D.
George Washington University
Washington, D.C.

APPENDIX M

THIRD ANNUAL WRITER'S AWARD
PROGRAM COVER PAGE

Writing to Read

A COMPUTER-BASED WRITING AND READING SYSTEM



FRIENDSHIP EDUCATIONAL CENTER

FRIDAY, MAY 30, 1986, 10:00 A.M.

THE PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

DR. FLORETTA DUKES McKENZIE
SUPERINTENDENT OF SCHOOLS
CHIEF STATE SCHOOL OFFICER

APPENDIX N

SUMMARY OF RESULTS OF 1986
METROPOLITAN ACHIEVEMENT
TESTING, KINDERGARTEN
AND FIRST GRADE

Summary of MAT 1986 Posttest Results

There are very few norm referenced tests with a language achievement sub-test at the kindergarten level. Psychological Corporation does produce the Metropolitan Achievement Test which includes both reading and language subtests at the pre-primer level. Thus, that was the normed referenced instrument selected to measure the achievement outcome of the program. Analyses were completed using NCE scores with means converted to percentiles. Significance of differences between Writing to Read and comparison groups were determined through t-tests computed using the SPSS program with differences accepted as significant if the t distribution probability was at the .05 level.

KINDERGARTEN	READING*		LANGUAGE*	
Group	Number	Percentile Score	Number	Percentile Score
Writing to Read	500	76	512	76
Comparison	245	56	266	62

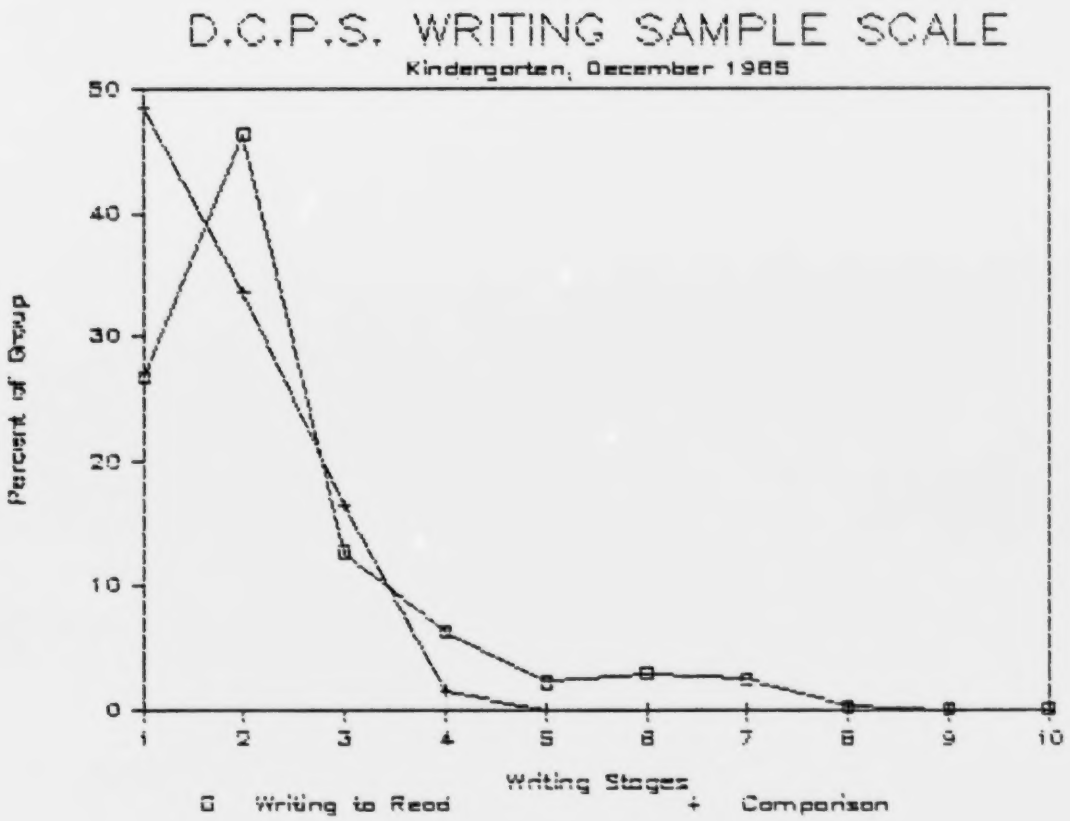
*p<.05

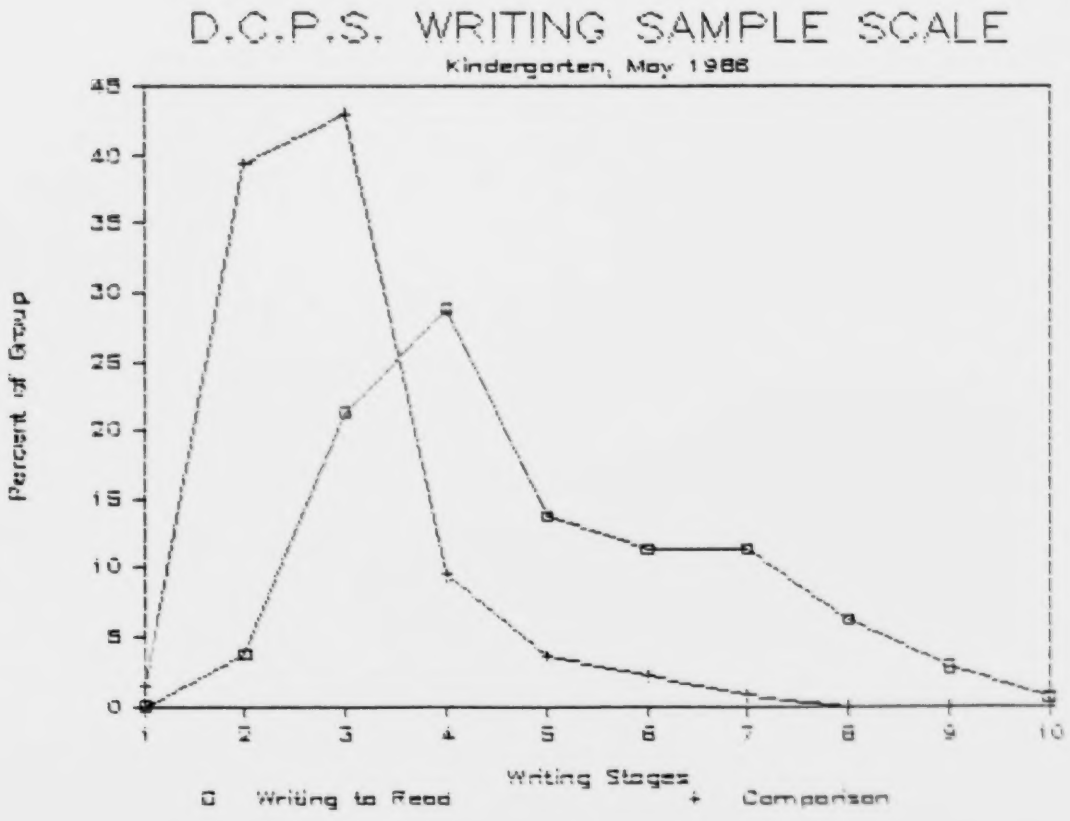
FIRST GRADE	READING*		LANGUAGE*	
Group	Number	Percentile Score	Number	Percentile Score
Writing to Read	402	46	385	58
Comparison	335	35	332	42

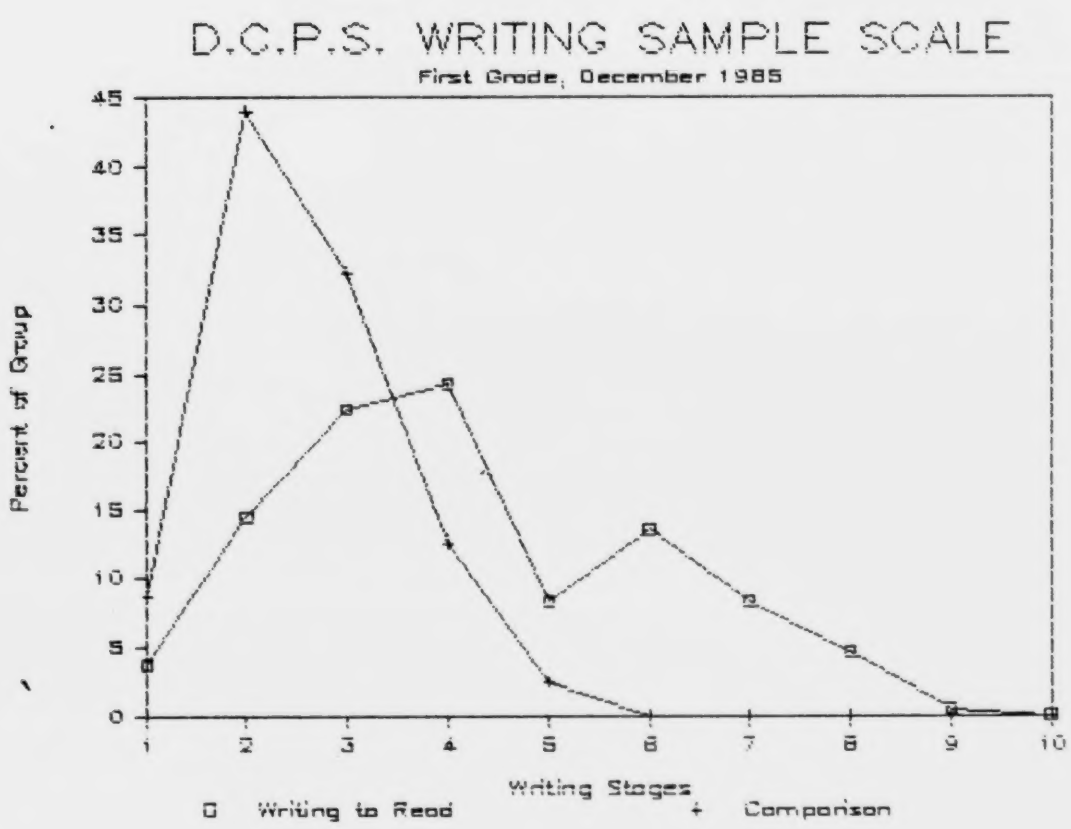
*p<.05

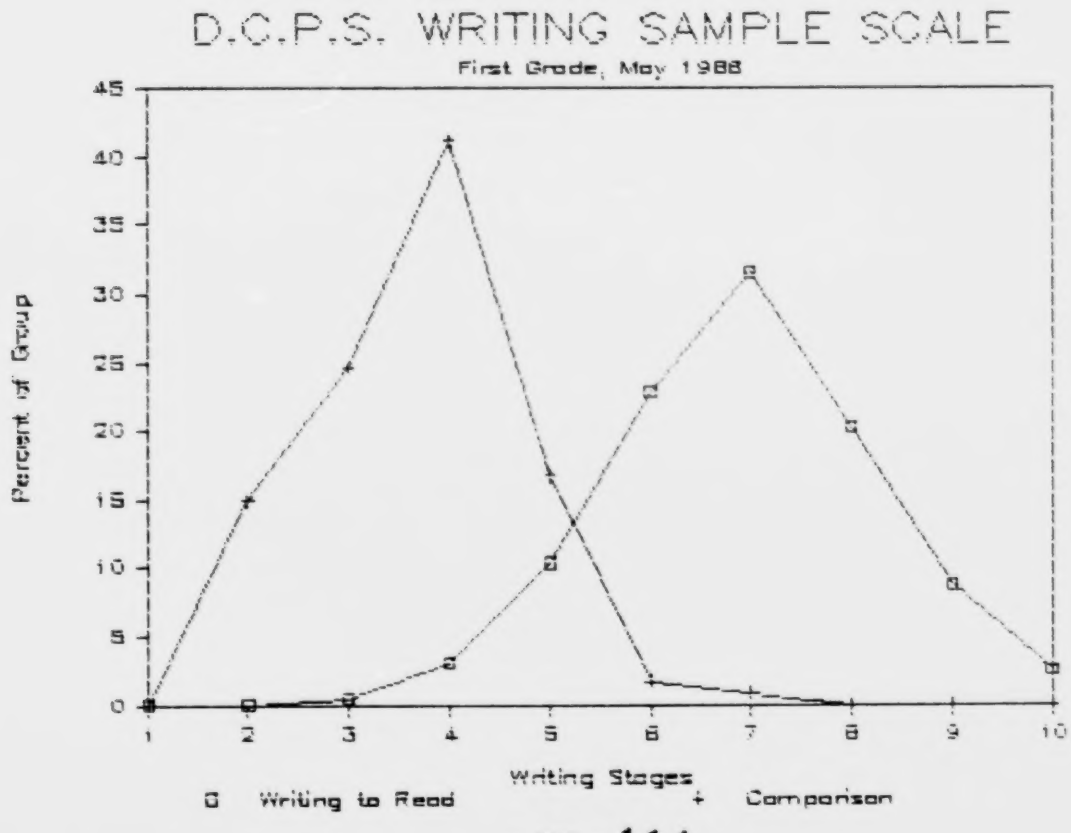
APPENDIX O

GRAPHS OF RESULTS OF DCPS
WRITING SAMPLE SCALE,
GRADES K AND 1


D.C.P.S. WRITING SAMPLE SCALE
Kindergarten, December 1985
Percent of Group
50
40
30
20
10
0
1
2
3
4
5
6
7
8
9
10
Writing Stages
Writing to Read
Comparison


D.C.P.S. WRITING SAMPLE SCALE
Kindergarten, May 1986
Percent of Group
45
40
35
30
25
20
15
10
5
0
1
2
3
4
5
6
7
8
9
10
Writing Stages
Writing to Read
Comparison


D.C.P.S. WRITING SAMPLE SCALE
First Grade, December 1985
Percent of Group
45
40
35
30
25
20
15
10
5
0
1
2
3
4
5
6
7
8
9
10
Writing Stages
Writing to Read
Comparison


D.C.P.S. WRITING SAMPLE SCALE
First Grade, May 1988
Percent of Group
45
40
35
30
25
20
15
10
5
0
1
2
3
4
5
6
7
8
9
10
Writing Stages
Writing to Read
Comparison

APPENDIX P

DCPS WRITING SAMPLE SCALE
RESULTS IN PERCENTS,
GRADES K AND 1

Kindergartners at Each Stage

December, 1985

Stage	1		2		3		4		5		6	
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	110	26.8	191	46.5	52	12.7	26	6.3	9	2.2	12	2.9
Comparison	62	48.4	43	33.6	21	16.4	2	1.6	0	0.0	0	0.0

Stage	7		8		9		10		Total		Mean	*
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	10	2.4	1	0.2	0	0.0	0	0.0	411	100	2.30	
Comparison	0	0.0	0	0.0	0	0.0	0	0.0	128	100	1.71	

*p<.05

May, 1986

Stage	1		2		3		4		5		6	
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	0	0.0	12	3.8	68	21,3	92	28.8	44	13.8	36	11.3
Comparison	2	1.5	54	39.4	59	43.1	13	9.5	5	3.6	3	2.2

Stage	7		8		9		10		Total		Mean	*
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	36	11.3	20	6.3	9	2.8	2	0.6	319	100	4.84	
Comparison	1	0.7	0	0.0	0	0.0	0	0.0	137	100	2.64	

*p<.05

First Graders at Each Stage

December, 1985

Stage	1		2		3		4		5		6	
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	8	3.7	31	14.4	48	22.3	52	24.2	18	8.4	29	13.5
Comparison	11	8.7	56	44.1	41	32.3	16	12.6	3	2.4	0	0.0

Stage	7		8		9		10		Total		Mean	*
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	18	8.4	10	4.7	1	0.5	0	0.0	215	100	4.19	
Comparison	0	0.0	0	0.0	0	0.0	0	0.0	127	100	2.56	

*p<.05

May, 1986

Stage	1		2		3		4		5		6	
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	0	0.0	0	0.0	1	0.5	6	3.1	20	10.4	44	22.8
Comparison	0	0.0	17	14.9	28	24.6	47	41.2	19	16.7	2	1.8

Stage	7		8		9		10		Total		Mean	*
Group	#	%	#	%	#	%	#	%	#	%	#	%
Writ. to Read	61	31.6	39	20.2	17	8.8	5	2.6	193	100	6.91	
Comparison	1	0.9	0	0.0	0	0.0	0	0.0	114	100	3.66	

*p<.05